# Village of Islandia

1100 Old Nichols Road Islandia, NY 11779 Suffolk County, New York

## **Stormwater Management Program Plan**



New York State Pollutant Discharge Elimination System (SPDES)
General Permit for Stormwater Discharges
from

Municipal Separate Storm Sewers (MS4s) General Permit No. GP-0-24-001

December 2024

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# STORMWATER MANAGEMENT PROGRAM PLAN MS4 SPDES PERMIT NO. NYR20A250

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#### **Acronym List**

BI Building Inspector

BMP Best Management Practice SMO Code Enforcement Officer CFR Code of Federal Regulations

CGP SPDES General permit for Stormwater Construction Activities, GP-0-20-001

CWA Clean Water Act

ECL Environmental Conservation Law

EDC Effective Date of Coverage EDP Effective Date of the Permit eNOI Electronic Notice of Intent

EPCRA Emergency Planning and Community Right-To-Know Act

ERP Enforcement Response Plan

IDDE Illicit Discharge Detection and Elimination

MCM Minimum Control Measure

MS4 Municipal Separate Storm Sewer System

MS4 GP SPDES General Permit for Stormwater Discharges from the Municipal Separate

Storm Sewer Systems, GP-0-24-001

MSGP SPDES Multi-Sector General Permit for Stormwater Discharges Associated with

Industrial Activity, GP-0-23-001

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System NYCRR – New York Codes,

**Rules and Regulations** 

NYS DEC New York State Department of Environmental Conservation

O&M Operations and Maintenance
ORI Outfall Reconnaissance Inventory

POC Pollutant of Concern

RSE Regional Stormwater Entity

SPDES State Pollutant Discharge Elimination System

SMO Stormwater Management Officer
SMP Stormwater Management Practice
SWMP Stormwater Management Program
SWPPP Stormwater Pollution Prevention Plan

TMDL Total Maximum Daily Load

USEPA United States Environmental Protection Agency

#### **Definitions**

Best Management Practices (BMPs): Schedule of activities, practices, operating procedures, treatment requirements, and prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State.

Minimum Control Measure (MCM): Elements of the MS4 stormwater management program. There are a total of six elements and when implemented together are expected to result in significant reductions of pollutants discharged into receiving water bodies.

Municipal Facility: An MS4 Operator owned and/or operated facility with the potential to discharge pollutants to the MS4 and /or surface water of the State.

Municipal Separate Storm Sewer Systems (MS4): A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law that are designed or used for collecting or conveying stormwater.

MS4 Operator: The person, persons, or legal entity that obtains coverage and is responsible for the MS4.

MS4 Outfall: Any point of stormwater discharge from pipes, ditches, and swales, as well as other points of concentrated flow, to surface water of the State from an MS4 Operator's MS4. Areas of sheet flow which drain to surface waters of the State are not considered MS4 outfalls.

New York State Department of Environmental Conservation (NYSDEC): State body of government that is the Stormwater NPDES Permitting Authority.

Pollutant of Concern (POC): A pollutant causing the impairment of an impaired water segment with an approved TMDL and or listed in Appendix C of GP-0-24-001, including phosphorus, silt/ sediment, pathogens nitrogen and floatables.

State Pollutant Discharge Elimination System (SPDES): The State system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

Stormwater Management Program (SWMP): The program developed and implemented by the MS4 Operator which provides a comprehensive integrated planning approach involving public participation and, where necessary, intergovernmental coordination, to reduce the discharge of POCs and specified pollutants to the MEP, using management practices, control techniques and systems, design and engineering methods and other appropriate provisions. MS4 Operators are required at a minimum to develop, implement and enforce a SWMP designed to address POCs and reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Environmental Conservation Law and the Clean Water Act. The SWMP must address all permit requirements in the SPDES general permit.

Stormwater Management Program Plan (SWMP Plan): Document used by the covered entity to record, develop, plan, and implement SWMP elements. The SWMP plan must describe how pollutants in stormwater runoff will be controlled.

Stormwater Pollution Prevention Plan (SWPPP): A site-specific, written document that:

- Identifies potential sources of stormwater pollution at the construction site.
- Describes practices to reduce pollutants in stormwater discharges from the construction site.
- Identifies procedures the operator will implement to comply with the terms and conditions of a construction general permit.

Storm-sewershed (sewershed): The catchment area that drains to a waterbody based on the MS4 and surface topography. Adjacent catchment areas that drain to the same waterbody are not separate storm-sewersheds.

Surface Water(s) of the State: Includes lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial seas of the State of New York, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

#### 1.0 SWMP PLAN OVERVIEW

This Village of Islandia Stormwater Management Program (SWMP) Plan has been developed to comply with the requirements of the *New York State Department of Environmental Conservation (NYSDEC)* General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4) Permit No. GP-0-24-001. Under the GP-0-24-001 Permit, permittees must develop, implement and enforce a SWMP designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable (MEP) in order to protect water quality and satisfy the appropriate water quality requirements of the Environmental Conservation Law and Section 402 of the Clean Water Act.

#### 1.1 INTRODUCTION

The Village of Islandia (Village) is located in the northern region of the Town of Islip in Suffolk County, New York. It has a total area of 2.2 square miles. Incorporated in 1985, the Village of Islandia is home to over 3,000 residents and over 150 businesses. The Connetquot Brook is situated within the Village boundary and receives stormwater discharges from the overland surface runoff and some storm drainage systems constructed in the Village. In addition, stormwater from some areas is channeled to three (3) New York State owned and three (3) Village owned and maintained Recharge Basins.

Village of Islandia has been identified as a Traditional Land Use Control municipality by the NYSDEC under a previous iteration of the MS4 General Permit (GP-02-02) and obtained stormwater permit coverage in 2003. The Village Permit ID number is NYR20A250. In accordance with the United States Environmental Protection Agency (USEPA) Stormwater Phase II rule, MS4 owners/ operators are required to develop a Stormwater Management Plan (SWMP) which includes six (6) program elements - minimum control measures (MCM), to reduce the discharge of pollutants to the maximum extent practicable (MEP). The six (6) required MCMs include:

MCM 1: Public Education and Outreach

MCM 2: Public Involvement/Participation

MCM 3: Illicit Discharge Detection & Elimination (IDDE)

MCM 4: Construction Site Stormwater Runoff Control

MCM 5: Post-Construction Stormwater Management

MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations

#### 1.2 NOTICE OF INTENT

In accordance with Part II.A of the MS4 General Permit, The Village of Islandia submitted the electronic (eNOI) to NYSDEC on December 12, 2024. With this submission the Village agrees to comply with the permit and conditions of GP-0-24-001. Additionally, with the eNOI submission, the Village has received authorization to discharge stormwater under the terms and conditions noted in GP-0-24-001. The effective dates of coverage under permit GP-0-24-001 are January 3, 2024, through January 2, 2029.

# 1.3 POLLUTANTS OF CONCERN AND IMPACTS ON STORMWATER POLLUTION

The Village has a single outfall located near the eastern Village boundary. That outfall collects runoff from a 2100 LF segment of Johnson Avenue under Islandia jurisdiction. The outfall also discharges runoff from a subsurface drainage system under Town of Islip jurisdiction that is located adjacent to the Villages eastern boundary line. That system collects no Village runoff. The Islandia segment of Johnson Avenue is surrounded by approximately 90 acres of Suffolk County and Village preserved lands and 15 acres of New York State Department of Transportation (NYSDOT) wetland drainage area. Fourteen residences front Johnson Avenue within the road segment that drains to the outfall; none of these residential properties exceeds one-acre in area. Additional residences back along the Suffolk County preserved lands and NYSDEC wetland drainage area and are generally more than 600' from surface waters. There are no commercial or industrial land uses within the catchment area of the outfall and none surrounding the preserved lands. The outfall contributes runoff to the freshwater segment of the Connetquot River. Connetquot River (Upper and tribs) is identified as the surface water body receiving stormwater discharges from the overland surface runoff and storm drainage systems constructed in the Village. This river segment is not identified as a 303d waterbody nor is there a Total Maximum Daily Load (TMDL) in place. There are currently no use impairments identified. The river is an ecologically sensitive trout-spawning stream that discharges to the Great South Bay segment of the South Shore Estuary Reserve.

Although no use impairments are identified and a TMDL is not required, the Village recognizes the sensitive nature of the river and their responsibility to reduce potential pollutants entering the river to ensure continued water quality. POC for this segment that have the potential of being generated on Village roads and lands include:

- Litter and debris from paved driveways and parking lots;
- Polycyclic aromatic hydrocarbons, oils and greases from paved areas and driveways;
- Salt, sand and de-icing chemicals from winter road maintenance operations;
- Fertilizers, pesticides and herbicides from lawns and gardens; and
- Pathogens from on-site individual septic systems.

In 2002, the Village undertook a construction project to improve the storm drainage system that carries runoff from the Village segment of Johnson Avenue that drains into the Connetquot River. The existing drainage system consists of a stone lined swale to filter runoff prior to entering the Connetquot River. A copy of the design plans has been included in this Plan (Map 1).

#### 1.3.1 LEGAL AUTHORITY

The Village of Islandia has the legal authority to enforce the provisions of GP-0-24-001 through enactment of local laws in conformance with model local laws to prohibit illicit discharges and control erosion.

The Village has adopted the New York State Department of Environmental Conservation Model Local Law to Prohibit Illicit Discharges, Activities, and Connections to Separate Storm Sewer Systems, April 2006 (NYSDEC Model IDDE Local Law 2006). Refer to the Local Law for Storm Sewers in §143-Part 1 of the Village Code (adopted by the Village of Islandia on 03-04-2008 by L.L. No. 2-2008).

The Village has adopted the New York State Department of Environmental Conservation Sample Local Law for Stormwater Management and Erosion & Sediment Control, March 2006 (NYSDEC Sample SM and E&SC Local Law 2006). Refer to the Local Law for Stormwater Management in §143-Part 2 of the Village Code (adopted by the Village of Islandia on 03-04-2008 by L.L. No. 2-2008).

#### 1.3.2 ENFORCEMENT MEASURES AND TRACKING

#### Enforcement Response Plan

The Enforcement Response Plan (ERP) developed and enforced by the Village is described in the Village Code - Chapter 143 Stormwater Management, Part 1. Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems and Part 2. Stormwater Management and Erosion & Sediment Control (Adopted 3-4-2008 By L.L. No.3-2008). Article II and Article VII- Administration and Enforcement in Part 1 and Part 2 respectively note the actions to be taken for violations of §143 (Stormwater Management) of the Village Code.

#### **Enforcement Tracking**

Instances of non-compliance in the SWMP Plan are tracked and addressed by the Village in accordance with the following Village Codes: Chapter 143 Stormwater Management

Part 1: Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems -

§143-12 - Enforcement, penalties for offenses; §143-13 Appeal of notice of violation; §143-14 Corrective measures after appeal; §143-15 Injunctive relief; §143-16 Alternative remedies; §143-17 Violations deemed public nuisance; §143-18 Remedies not exclusive; §143-19 Severability.

Part 2: Stormwater Management and Erosion & Sediment Control –

§143-40 - Enforcement, penalties for offenses; §143-41 – Fees for services; §143-42 Severability.

#### 1.3.3 SWMP PLAN RECORD KEEPING AND REPORTING REQUIREMENTS

#### Record Keeping

The Village must maintain records required by the SPDES General permit GP-0-24-001 for a minimum of five (5) years after they are generated and submitted to the Department within a reasonable specified time period of a written request for such information. Documents may be maintained in electronic format, in accordance with NYCRR 750-2.5 (e) (1). Records, including the NOI and SWMP Plan, must be made available to the public at reasonable times during regular business hours.

#### Reporting

Reports must be submitted to New York State Department of Environmental Conservation (NYSDEC) electronically. The reporting period for the Annual Report is January 3 of the current year to January 2 of the following year (Reporting Year). The Annual Report, which documents progress in the implementation of this SWMP and compliance with permit GP-0-24-001, must be submitted to the Department by April 1 of the year following the end of the Reporting year.

Twice a year, an Interim Progress Certification must be submitted to the NYSEC that verifies that activities included in GP-0-24-001 have been completed. The Interim Progress Certification for the period of January 3 through June 30 of the same year must be submitted to the NYSDEC by October 1 of the same year. The Interim Progress Certification for the period of July 1 through January 2 of the following year must be submitted to the NYSDEC by April 1 of the following year along with the Annual Report. Submission of the Annual Report is not a substitute for submission of the Interim Progress Certification.

#### 1.3.4 SWMP PLAN VILLAGE OFFICIALS

Village Staff Directory			
Name	Title	Contact Information	
Allan M. Dorman	Mayor	adorman@newvillageofislandia.com	
Thomas Annicaro	Deputy Mayor	tannicaro@newvillageofislandia.com	
Gerald Peters	Building Inspector/ Superintendent DPW	gpeters@newvillageofislandia.com	
Keith Kellner	Building Inspector/ Plans Examiner	kkellner@newvillageofislandia.com	
Joseph W. Prokop, Esq.	Village Attorney	JWprokopesq@aol.com	
Patricia Dorman	Village Clerk	pdorman@newvillageofislandia.com	
Kimberly Davis	Code Enforcement Supervisor/ Public Safety	kdavis@newvillageofislandia.com	
Marilyn Griffaton	Deputy Village Clerk	mgriffaton@newvillageofislandia.com	
Leslie Murray	Village Court Clerk	lmurray@newvillageofislandia.com	

#### **EXECUTIVE OFFICER**

Since the inception of the SWMP, the Village Mayor, has been authorized to execute the SWMP Plan in the following activities:

- Appointing the SWMP Plan Local Stormwater Public Contact;
- Hiring of a consultant to assist the Village in developing and implementing the SWMP Plan;
- Establishing the Stormwater Management Program Plan Coordinator and Annual Report Preparer;
- Scheduling of the program's implementation schedule;
- Overseeing the execution of the SWMP Plan;
- Identifying staff needed to carry out the program; and
- Developing a budget for the implementation of the program

In the future the Village Mayor will continue to work closely with the SWMP Plan Local Stormwater Public Contact and Village Consultant, Coordinator and Annual Report Preparer in executing various components critical to the successful implementation of the program.

#### SWMP PLAN LOCAL STORMWATER COORDINATOR & PUBLIC CONTACT

The Building Inspector/Superintendent DPW has been assigned the role of Stormwater Management Officer (SMO) and the Village Clerk has been assigned the role of local Stormwater Coordinator and Public Contact. The Stormwater Management Officer (SMO) and Village Clerk will continue to be actively engaged in the following activities:

- Coordinating the SWMP Plan implementation activities;
- Scheduling of the program's implementation schedule;
- Overseeing the execution of the consultant work;
- Assisting in the coordination of staffing needed to carry out the program; and
- Assisting the Mayor in the development of the SWMP Plan Budget.

For further information on the ongoing SWMP, the Stormwater Management Officer (SMO) and Village Clerk may be contacted at the following address:

Incorporated Village of Islandia Village Clerk 1100 Old Nichols Road Islandia, NY 11779

(631) 348-1133

#### SWMP PLAN CONSULTANT AND ANNUAL REPORT PREPARER

Since the inception of the SWMP Plan in 2003 the Village has retained a Stormwater Consultant, and annual report preparer. The Village intends to continue to contract with a stormwater professional to address the Villages stormwater requirements. The stormwater consultant will continue to be actively engaged in the following activities:

- Assisting the Village in the preparation, revisions and updates of the SWMP Plan and implementation of the described activities;
- Preparation of newsletters, fact sheets, presentations of activities on the current and ongoing SWMP implementation activities;
- Presenting the program activities at the annual public meeting; and
- Preparation of the Annual Report for NYSDEC submission
- Review site plans with over one-acre of disturbance for compliance with E&SC and SWPPP regulations and procedures.

#### SWMP PLAN OPERATION AND MAINTENANCE STAFF

The Village's operations and facilities that contribute or potentially contribute POCs' are limited to the following operations:

- Road maintenance
- Village lawn equipment and vehicle maintenance
- Lawn care
- Stormwater drainage maintenance

The Village's Operation and Maintenance (O&M) staff, comprised members of the Highway Department and Grounds Maintenance personnel, will continue to be responsible for lawn care, grounds maintenance, and road repair and operations.

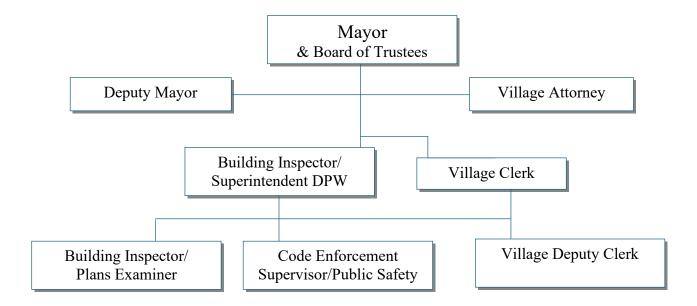
Purchase orders for specific construction projects and maintenance operations, including street sweeping, roadway snow removal, trash and recyclables collection, and storm sewer and catch basin cleaning will be issued to outside vendors, as needed, to perform this work on a contract basis.

The Village will conduct a meeting with appropriate Village staff to identify any issues that may develop regarding reporting, tracking and recordkeeping requirements for Stormwater management and illicit discharge detection and Village operations documentation. Additionally, the Village will conduct a meeting with Stormwater Management Officers (SMO), Building Inspectors (BI) and Highway

Department staff to outline procedures to document stormwater related activities that require documentation for the next NYSDEC annual report.

An annual meeting is held by the Mayor, Village Board, additional involved officials and personnel designated above, the stormwater consultant and interested citizens to discuss the ongoing stormwater program(s) and progress made towards meeting the stormwater BMP permit goals.

#### **ORGANIZATIONAL CHART**



#### 1.3.5 SWMP PLAN EVALUATION

Once every five (5) years, the Village must evaluate this SWMP for compliance with the terms and conditions of permit GP-0-24-001 and the status of achieving the requirements outlined in the permit. The SWMP evaluation must be documented in the SWMP Plan.

# 2.0 STORMWATER MANAGEMENT MINIMUM CONTROL MEASURES (MCMs)

The following section describes the six MCM that are required for compliance with NYSDEC MS4 Permit GP-0-24-001. Each section describes the MCM, outlines the general permit requirements, identifies the best management practices that will be implemented during the permit period from 1/3/2024 through 1/2/2029 and addresses the measurable goals that will be included in the annual reporting.

#### STORM SEWERSHED IMPROVEMENT STRATEGIES

The following storm sewershed improvement strategies are organized by the MCMs as defined by the NYSDEC MS4 Permit GP-0-24-001. Refer to Part VI of the MS4 Permit in Appendix 2, for MCM description and compliance requirements.

#### 2.1 MCM 1 - PUBLIC EDUCATION AND OUTREACH PROGRAM

The Public Education and Outreach MCM consists of BMPs that focus on development of educational materials that will inform the public about the impact of stormwater discharges on local water bodies. The materials developed will contain information on how various community members can take actions that will reduce pollution levels in local waters. The target pollutant sources are construction site runoff, illicit discharges and the identified pollutant of concerns.

As the operator of a regulated MS4, the Village must:

- Identify watershed pollutants of concern, area of concern and target audiences;
- Develop and implement an ongoing public education and outreach program designed to educate the general public and specific target audiences; on the impacts of stormwater discharges, pollutant of concerns and their sources, steps contributors of these pollutants can take to reduce the level in storm runoff, and steps contributors of non-stormwater dischargers (as defined in Permit GP-0-24-001) can take to reduce pollutants;
- Develop, record and periodically assess and modify measureable goals; and
- Select and conduct appropriate education and outreach activities and measurable goals to ensure reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.

#### **Existing Program Compliance**

The Village has developed public education and outreach program materials designed to describe the impacts of stormwater discharges on waterbodies, identify POC and their sources, and identified steps that the Village is taking in reducing pollutants in runoff.

The education and outreach include stormwater best management practices related topics include, but not limited to:

- Sanitation/recycling information
- Snow removal/salt application
- Pharmaceutical disposal information

- Auto care and auto products disposal
- Pet waste management
- Yard care/landscaping
- Fertilizer and household chemicals management and disposal
- Paint recycling and disposal programs
- Septic maintenance
- Swimming Pool discharges
- Benefits of Rain Gardens, Rain Barrels
- Feeding water bird (geese, ducks)
- Construction site BMPs.

The target audience include public employees, developers, contractors, residential, businesses, general public and school children.

The public education and outreach program includes:

- 1. Distribution of solid waste disposal information annually.
- 2. Discussion of Stormwater Management Program at annual meetings.
- 3. The Village has developed a stormwater webpage. The webpage posting explains the stormwater program requirements, Village compliance efforts, and residential education on ways to reduce pollutants generated and links to other stormwater web sites. <a href="https://www.newvillageofislandia.com/government-services/stormwater-management/">https://www.newvillageofislandia.com/government-services/stormwater-management/</a>
  Provided sources for additional stormwater information on the Village website and in Village newsletter.
- 4. Completed the storm drain decaling program.
- 5. Offer stormwater brochures at Village Hall and at Village Events. Also distributed stormwater information door to door during the storm drain decaling program.
- 6. Continued to distribute stormwater information including water bottles with the "Only Rain Down the Drain" logo.
- 7. Identify watershed pollutants of concern, area of concern and target audiences.

The Village added resident information on illicit discharge reporting to Village website and in a Village newsletter, provided copies of manuals and publications related to stormwater management and illicit discharge which are available for review in Village Hall.

#### MCM 1: Program Compliance Continuation

Activities and Measurable Goals	Responsible	Target Year				
	Party	2024	2025	2026	2027	2028
Continue to provide Stormwater Pollution Prevention information at:	SWMP Coordinator	✓				
the Village Hall information kiosk and from the front desk						
at Village events including seasonal events at Village Hall including Easter Egg Hunt,						
Community Garden Planting Day, Village Barbeque, and Pumpkin Festival						
<ul> <li>appropriate public locations</li> <li>when requested by specific groups and</li> </ul>						

organizations				
Identify the document focus areas	SWMP		<b>✓</b>	
	Coordinator			
Identify and document target audiences and associated	SWMP		<b>√</b>	
pollutant generating activities	Coordinator		·	
Identify and document education and outreach topics	SWMP		<b>√</b>	
	Coordinator		·	
Identify and document illicit discharge education	SWMP		✓	
materials. Update the stormwater materials on the	Coordinator		•	
Village website, including information on illicit				
discharge identification, and provide contact number				
and addresses.				
Identify and document distribution methods for	SWMP		$\checkmark$	
educational materials	Coordinator			
Annual review of public education and outreach	SWMP	<b>√</b>		
program	Coordinator			

#### MCM 1 Required Annual Reporting

The following data items should be compiled and identified in the Annual Report as required for each year:

- A list of all education materials downloaded and the approximate number distributed by the Village.
  These may also include IDDE education activities for public employees, businesses and general
  public, construction site stormwater control training and employee pollution prevention and good
  housekeeping training.
- A list of all outreach activities performed for the general public and any target audiences including estimated number of people attending and amount of materials distributed.
- Collect data on the effectiveness of the program, BMP and measurable goal assessment.

#### 2.2 MCM 2 - PUBLIC INVOLVEMENT AND PARTICIPATION

The Public Involvement and Participation MCM consists of BMPs that focus on involving the local public in development and implementation of the SWMP. BMPs will include practices designed to seek public input on SWMP and Annual Report accomplishments along with describing specific activities that will encourage public participation. BMPs will also identify target audiences with interest in specific BMPs such as boating or gardening.

As operator of a regulated MS4, The Village of Islandia must:

- Comply with State Open Meeting law and local public involvement requirements to implement this MCM;
- Develop and implement a public involvement and participation program that; indentifies key individuals and groups with interest in the SWMP;
- Identify input the Village will seek from key individuals or groups, describes the public involvement and participation activities the Village will undertake including water quality reporting telephone number, stewardship activities such as stream clean-ups and storm drain marking;
- Identify a local stormwater public contact that residents can contact for concerns over management and compliance;
- Present the Annual Report at a public meeting or on the Village website. Presentation will follow the requirements of Permit GP-0-24-001 for notification and procedures;
- Ensure that copies of the Annual Report and this SWMP Plan are available for public inspection within Village Hall and on the Village website;
- Develop, record, periodically assess and modify measurable goals; and
- Select appropriate public involvement and participation activities and measurable goals to ensure reduction of pollutants of concern in stormwater discharges to the maximum extent practicable.

#### **Existing Program Compliance**

The Village has developed an ongoing public education and outreach program designed to describe the impacts of stormwater discharges on waterbodies, identify POC and their sources and identified steps that the Village and its residents are and can take to reduce pollutants in runoff. The public involvement and participation program included:

- 1. Identified public contact for the stormwater program;
- 2. Notified public of the availability of the Annual Report for review, advertised the public meetings for annual report presentations and for public comment during and following the meeting;
- 3. Completed storm drainage decal program with Village volunteers. Included information on efforts in Village newsletter and provided certificates of achievement to volunteers;
- 4. Volunteers handed out stormwater brochures and information to local residents during decal event;
- 5. Published photographs and news articles regarding the storm drain decaling program on the Village website; and
- 6. Provided notification of trash and recycling schedules and researched companies to perform a Village STOP (Stop Throwing Out Pollutants) program.

#### MCM 2: Program Compliance Continuation

Activities and Measurable Goals	Responsible	Target Year				
	Party	2024	2025	2026	2027	2028
Designate a SWMP Public Contact.	Executive Officer	✓				
Complete Interim Report	SWMP	✓				
	Consultant					
Submit Interim Report to NYSDEC	SWMP	<b>√</b>				
	Consultant					
Complete Annual Report	SWMP					
	Consultant					
Submit Annual Report to NYSDEC	SWMP					
-	Consultant					
Promote the availability of the stormwater	SWMP	✓				
materials including the SWMP Plan and the	Coordinator					
Annual Reports for public review and comment						
and provide access to copies of the stormwater						
materials upon request	CIVIN (D					
Provide access to and/or copies of the Annual	SWMP	$\checkmark$				
Reports	Coordinator					
Participate through promotion, sponsorship, or	SWMP	$\checkmark$				
other involvement in local activities aimed at	Coordinator					
increasing public participation to reduce						
stormwater pollutant loads and improve water						
quality.						

#### MCM 2 Required Annual Reporting

The following data items should be compiled and identified in the Annual Report as required for each year:

- Annual report presentation information including how the report was distributed, and date, time and attendees for any public meeting;
- Comments received and intended responses;
- Public involvement and participation activities including number of people participating, number of calls regarding illicit discharge and pollution concerns, extent of any activities including type and participants; and
- Collect data on the effectiveness of the program, BMP and measurable goal assessment.
  - o Maintain catalog of educational materials distributed
  - Track events where residents participate in pollution reduction efforts, such as drainage structure decals application.

#### 2.3 MCM 3 - ILLICIT DISCHARGE DETECTION AND ELIMINATION

The Illicit Discharge Detection and Elimination MCM consists of BMPs that focus on eliminating illicit discharges from the Village. The BMPs includes locating and mapping outfalls, maintaining outfall records, adopting a legal authority mechanism to prohibit illicit discharges, enforcement procedures, and actions, procedures in identifying illicit discharge sources, and procedures for removing illicit discharge sources.

As operator of a MS4, The Village of Islandia must:

- Develop, implement, and enforce a program to detect and eliminate illicit discharges;
- Develop and maintain an updated storm sewer system map, showing the locations of all known outfalls, associated water, impaired waters that received discharge from the outfalls. Field verify outfalls and conduct reconnaissance survey for illicit discharge. Delineate preliminary boundaries of the storm sewershed. Add new outfalls as constructed or discovered;
- Prohibit, through ordinance or other regulatory mechanisms, illicit discharges into storm sewer
  systems and implement enforcement procedures and actions. Certify that local law is equivalent to
  New York State (NYS) Model Local Law to Prohibit Illicit Discharges;
- Develop and implement procedures to detect and address non-stormwater discharges, including illegal dumping, to the Village waters;
- Provide education to municipal employees, local businesses and the general public on hazards associated with illegal discharges and improper disposal. Prevent or minimize, to the maximum amount able, hazardous substance or oils discharges from Village lands. Evaluate the program as necessary to develop and implement methods to prevent reoccurrences of these discharges;
- Track the number of illicit discharges identified and how they were controlled or eliminated. Include this information in the annual report;
- Select IDDE BMPs and measurable goals to assess reduction of pollutants in stormwater discharges;
- Periodically assess MCMs and measurable goals and modify as needed.

#### **Existing Program Compliance**

The Village has developed an illicit discharge detection and elimination program designed to describe the impacts of stormwater discharges on waterbodies, identify POC and their sources and identified steps that the Village is taking in reducing pollutants in runoff. The illicit discharge detection and elimination program included adoption and implementation the following BMPs to assessment illicit discharges within the watershed:

- 1. Field inspected and mapped the Village outfall and connected drainage systems including:
  - a. the type of conveyance system closed pipe or open drainage;
  - b. the type of pipe material, shape and size for closed pipe systems;
  - c. the type of channel/ditch lining material, shape and dimensions for open drainage systems;
  - d. the location and dimensions of any culvert crossings;
  - e. the locations of drop inlets, catch basins, and manholes;
  - f. the number and size of connections (inlets/outlets) to catch basins and manholes;
  - g. the direction of flow; and
  - h. non-stormwater discharges and illicit connections (hot spots), by:
    - i. opening of catch basins and manholes for visual dry weather flow observations of manholes and storm drain network;
    - ii. dye testing of catch basins, manholes and storm drain network; and

- iii. smoke testing of catch basins, manholes and storm drain network
- 2. The Village adopted a new code entitled Prohibition of Illicit Discharges, Activities, and Connections to Separate Storm Sewer Systems in accordance with the NYSDEC Sample Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems on March 4, 2008. See Appendix 4.
- 3. Mapped the outfall location and storm drainage system, assess the boundaries of the storm sewershed including the system that extend to adjacent jurisdictions.
- 4. Public Reporting of Illicit discharges The Village has a code enforcement complaint form online on the Village website. <a href="https://www.newvillageofislandia.com/contact/code-enforcement-online-form/">https://www.newvillageofislandia.com/contact/code-enforcement-online-form/</a> Additionally, a possible code violation can be made by letter, telephone, email, or in person to the appropriate Village department. Phone and email directory and emergency contact numbers are provided on the Village website. <a href="https://www.newvillageofislandia.com/contact/email-directory/">https://www.newvillageofislandia.com/contact/email-directory/</a>

#### MCM 3: Program Compliance Continuation

Activities and Measurable Goals	Responsible		Ta	arget Ye	ar	
	Party	2024	2025	2026	2027	2028
Inspect the Village outfall drainage system during a rainfall event to observe operation and complete an inspection report.	SMO/Highway Dept.	✓				
Inspect the outfall during dry weather events if IDDE is suspected.	SMO/ Highway Dept.	✓				
Maintain the record of the Village stormwater drainage system that outfalls to Connetquot River including all structures, sewershed limits and inter-municipal jurisdictions. Update the mapped information and maintain a record of routine maintenance visits and response to complaints.	SMO/ Highway Dept.	<b>✓</b>				
If additional outfalls are located or installed, update this MCM to prioritize outfalls.	SWMP Consultatnt			✓		
Develop and implement a monitoring locations inspection and sampling program	SMO/SWMP Coordinator			✓		
Develop and implement an illicit discharge track down and elimination program	SMO/SWMP Coordinator			✓		
Identify and update discharges exempt from prohibitions in the local law if determined to be substantial pollution contributors by NYSDEC.	SWMP Consultant			✓		
Document names of individuals who received training on the monitoring locations inspections and sampling program	SMO/SWMP Coordinator			✓		
Establish an email or phone number (with message recording capability) for the public to report illicit discharges.	SMO/SWMP Coordinator	<b>✓</b>				

Village Staff that have Received IDDE Training (Pending)				
Name	Title	Contact Information		
Gerald Peters	Building Inspector/ Superintendent DPW	gpeters@newvillageofislandia.com		
Keith Kellner	Building Inspector/ Plans Examiner	kkellner@newvillageofislandia.com		

#### MCM 3 Required Annual Reporting

Compile required reporting annually including:

- Number of illicit discharges detected and number eliminated;
- Percent of outfalls for which an outfall inspection or reconnaissance survey has been performed;
- Activities undertaken and results from informing public employees, businesses and general public of hazards associated with illegal discharges and improper disposal of waters;
- Collect data on the effectiveness of the program, BMP and measurable goal assessment.
  - o Maintain list of educational materials distributed related to illicit discharge
  - o Number of reports of potential illicit discharges received
  - o Number of illicit discharges detected and eliminated
  - o Number of remediation plans developed to mitigate pollutant discharges
  - o Tabulate illicit discharge reductions over the permit periods
  - o New outfalls, if identified, and connecting infrastructure

#### 2.4 MCM 4 - CONSTRUCTION SITE RUNOFF CONTROL

The Construction Site Runoff Control MCM consists of BMPs that focus on the reduction of pollutants from construction activities that result from land disturbance of greater than or equal to one acre or less than one acre if part of a larger common development plan. The control measures are applicable to private and municipal projects. The MCM describes the legal authority mechanism that will be used to require construction site runoff control BMPs and will address storm runoff from construction sites, site plan review procedures, structural and non-structural erosion control practices, control construction site waste products, and inspection and enforcement measures.

Under this minimum control measure, the Village will:

- Develop, implement and enforce the requirement of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities including:
  - address stormwater runoff from construction projects with land disturbance greater than or equal to one-acre;
  - includes adoption of a local law for an ordinance that require post-construction runoff controls in accordance with the NYSDEC Sample Local Law for Stormwater Management and Erosion and Sediment Control (Appendix 3).
  - include requirements for erosion control management practices that will reduce pollutant discharge;
  - provide for sanctions to ensure compliance;
  - Describes Stormwater Pollution Prevention Plan (SWPPP) review procedures;
  - Establish and maintain an inventory of appropriate construction stormwater management practices; and
  - Ensure adequate operation and maintenance via inspection as identified in NYS Stormwater Management Design Manual or SWPPP.
- Provide procedures for inspection and enforcement of erosion and sediment control measures by trained staff.
- Provides procedures for receipt and follow-up of public complaints regarding erosion and sediment control practices.
- Assess MCM periodically and modify if deemed necessary for continued stormwater pollution control.

#### **Existing Program Compliance**

The Village has developed a construction site runoff control program designed to describe the impacts of stormwater discharges on waterbodies, identify POC and their sources and identified steps that the Village is taking in reducing pollutants in runoff. The construction site runoff control program included the following procedures to assess illicit discharges within the watershed:

- 1. The Village of Islandia has adopted the *NYSDEC Sample Local Law for Stormwater Management and Erosion and Sediment Control* on March 4, 2008 under Local Law 2-2008.
- 2. BI and/or SMO or designated consultants conduct site inspections, review construction for compliance with approved plans, order corrective measures and issue violations as required or in response to complaints, when necessary.
- 3. Site plan and subdivision review and construction inspection includes requiring erosion and sedimentation control on site plans, conducting public hearings, and providing inspections during construction.

- 4. Village Board reviews and approves all site plan and subdivision permit applications on required alterations.
- 5. Village board meetings held for all required site development and open to public for review and comment.
- 6. Village board consults with Village engineer for review of technical aspects of site developments.
- 7. SWPPPs are required for all commercial and industrial sites over one-acre in area and for all residential subdivision development. When a SWPPP is submitted for review, the Village will hire an outside consultant with expertise in stormwater management and SWPPP requirements to review the submitted SWPPP for compliance with NYS standards and to provide construction inspection requirements using a developer escrow account. The Village has identified hourly costs to be charged for the review and inspection of Erosion and Sediment Control (E&SC) plans, SWPPP plans and inspection services. Actual costs, using the identified hourly costs, will be developed based on specific project size and requirements.
- 8. Provided copies of new or revised code to all municipal staff with review or inspection responsibilities including Trustees, Planning Board members, BI and/or SMO, Village Engineer and site plan review consultants.
- 9. Continue construction plan review tracking that includes following any required permitting documents from federal, state or local agencies, local stormwater regulations and temporary erosion control measures.
- 10. The Village requires all sites to conduct their weekly self-inspections by a qualified inspector in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) and to forward copies of their weekly inspection reports to the Village.
- 11. The Village Building Department also conducts inspections of active construction sites for compliance with construction regulations and maintains an inventory of active construction. The inventory includes information on the site, owner / operator contact information, when inspections were performed, and any enforcement actions. Additionally, the Building Department maintains a database of enforcement actions for construction activities. Additionally, compliance inspections are also conducted by the Building Inspector in response to a citizen complaint or to assess a non-permitted site. These are known as reconnaissance inspections. Reconnaissance Inspections should respond to:
  - Public complaints
  - Notification of unauthorized discharges and other on-site problems
  - Violations of regulatory requirements
- 12. SMO has the authority to assess all activities that do not appear to comply with Village ordinances and can order corrective measures and issue summonses for violations as required.
- 13. When the Village of Islandia determines that a land development activity is not being carried out in accordance with the requirements of this Part 2, it may issue a written notice of violation to the landowner. The notice of violation shall contain:

The name and address of the landowner, developer or applicant;

The address when available or a description of the building, structure or land upon which the violation is occurring;

A statement specifying the nature of the violation;

A description of the remedial measures necessary to bring the land development activity into compliance with this Part 2 and a time schedule for the completion of such remedial action;

A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;

A statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within 15 days of service of notice of violation.

- 14. Stop-work orders. The Village of Islandia may issue a stop-work order for violations of this Part 2. Persons receiving a stop-work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop-work order. The stop-work order shall be in effect until the Village of Islandia confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop-work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this Part 2.
- 15. Violations. Any land development activity that is commenced or is conducted contrary to this Part 2, may be restrained by injunction or otherwise abated in a manner provided by law.
- 16. Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this Part 2 shall be guilty of a violation punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this Part 2 shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.
- 17. Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this Part 2, the SMO may prevent the occupancy of said building or land.
- 18. Restoration of lands. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice,
- 19. the Village of Islandia may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

#### MCM 4: Program Compliance Continuation

Activities and Measurable Goals	Responsible	Target Year				
	Party	2024	2025	2026	2027	2028
Establish an email or phone number (with message	SMO/SWMP	✓				
recording capability) for the public to report	Coordinator	·				
complaints related to construction stormwater activity.						
Document names of individuals who received	SMO/SWMP	<b>√</b>				
construction oversight training.	Coordinator					
Develop and maintain an inventory of all	SMO/SWMP	<b>√</b>				
applicable construction sites	Coordinator	•				
Set up a recordkeeping for E&SC review at all	SMO/SWMP	<b>√</b>				
construction sites.	Coordinator	·				
Prioritize all construction sites on the construction	SMO/SWMP	<b>√</b>				
site inventory	Coordinator	·				
Document names of individuals who received	SMO/SWMP	✓				
erosion and sediment controls training	Coordinator	·				
Provide educational training to planning board and	SMO/SWMP	1				
review personnel to identify sites where Erosion	Coordinator					
and Sediment Control and SWPPP's are required.						

Provide SWPPP Inspection reporting forms for	Bldg. Dept./	✓		
SWPPP inspection procedures and results and for	Storm Water			
E&SC review.	Consultant			
Set up a recordkeeping for E&SC review at all	SMO/SWMP			
construction sites.	Coordinator			
Amend ordinance when necessary to maintain	SWMP	<b>√</b>		
compliance with NYS requirements	Officer			
Revise code fee schedule as needed.	SWMP	<b>√</b>		
	Officer	,		
Provide a list of approved structural and non-	Bldg. Dept./	✓		
structural BMP that meet the requirements of the	Storm Water	,		
stormwater regulations, update as new BMPs are	Consultant			
developed.				

Village Staff that have Received Erosion & Sediment Control Training				
Name	Title	Contact Information		
Gerald Peters	Building Inspector/ Superintendent DPW	gpeters@newvillageofislandia.com		
Keith Kellner	Building Inspector/ Plans Examiner	kkellner@newvillageofislandia.com		

#### MCM 4 Required Annual Reporting

Compile required annual reporting including:

- Number of construction site authorized for disturbance of more than one acre Village wide;
- Number of construction sites of greater than one acre in the surface water watershed;
- Number of SWPPPs reviewed total /Number of SWPPP for projects within a surface water watershed;
- Number and type of enforcement actions related to site runoff;
- Percent of active construction sites inspected once;
- Percent of active construction sites inspected more than once;
- Update local laws when required by NYSDEC; and
- Report program effectiveness, and assess BMP and measurable goals in addition to the above list to include:
  - Educational materials distributed related to E&SC and SWPP
  - Training record of Village personnel and consultants providing E&SC and SWPPP review and inspection
  - Maintain list of contractors on site development projects with SWPPP in place and names of trained individuals at site
  - Maintain list of construction site in compliance with SWPPP requirements and those with violations.

#### 2.5 MCM 5 - POST-CONSTRUCTION STORMWATER MANAGEMENT

The Post-construction Stormwater Management MCM includes BMPs that minimize or prevent water quality impacts for new development or reconstruction projects that disturb greater than one-acre. Project of less than one-acre that are part of a larger project that discharges into a MS4 or when specifically required by the NYSDEC are also included. The BMPs describe structural and non-structural practices, legal authority mechanisms and procedures for long-term operation and maintenance compliance.

Under this minimum control measure, the Village will:

- Develop, implement and enforce the requirement of the NYS SPDES General Permit for Stormwater Discharges from Construction Activities:
  - address stormwater runoff from new development and redevelopment projects with land disturbance greater than one –acre;
  - includes adoption of a local law for an ordinance that require post-construction runoff controls in accordance with the NYSDEC Sample Local Law for Stormwater Management and Erosion and Sediment Control(Appendix 3);
  - include structural management practices and/or non-structural practices that will reduce pollutant discharge;
  - Describe SWPPP review procedures;
  - Establish and maintain an inventory of appropriate post-construction stormwater management practices; and
  - Ensure adequate operation and maintenance via inspection as identified in NYS Stormwater Management Design Manual or SWPPP.
- Provide adequate resources for inspection and enforcement of development and redevelopment sites by trained staff.
- Assess MCM periodically and modify when deemed necessary for continued stormwater pollution control.

#### **Existing Program Compliance**

The Village has developed a program of post-construction stormwater management BMPs to reduce the pollution impacts from stormwater discharges on waterbodies, identify POC and their sources and identified steps that the Village is taking in reducing pollutants in runoff. The post-construction stormwater management program included the following procedures to reduce post construction runoff and pollution within the watershed:

- 1. The Village of Islandia has adopted the *NYSDEC Sample Local Law for Stormwater Management and Erosion and Sediment Control* on March 4, 2008 under Local Law 2-2008.
- 2. BI and/or SMO or professional consultants have received appropriate training and conduct site inspections, review construction for compliance with approved plans, order corrective measures and issue violations as required or in response to complaints.
- 3. SMO and/or maintenance staff review complaints for standing water and flooding add recordkeeping file for mitigation efforts.
- 4. Clean streets four times annually.
- 5. Inspect drainage structures connected to outfalls annually clean when needed.
- 6. Clean additional basins as needed when complaints are received.
- 7. SMO has the authority to assess all activities that do not appear to comply with Village ordinances, permits and certificates of occupancy and can order corrective measures and issue

- summonses for violations of all activities found not to comply with Village ordinances including the new E&SC and Illicit Discharge ordinances.
- 8. Provide copies of new code to all municipal staff with review or inspection responsibilities including Trustees, Board members, BI/SMO, and Village Engineer.
- 9. When a SWPPP is required, Village will hire an outside consultant to review SWPPP for compliance with NYS standards and to provide construction inspection requirements using a developer escrow account. Identify hourly costs to be charged for the review and inspection of E&SC and SWPPP plans and inspection services. Actual costs using hourly costs will be developed based on project size and requirements.
- 10. Provide educational training to planning board members and review personnel to identify sites where E&SC and SWPPP's are required.

#### MCM 5: Program Compliance Continuation

<b>Activities and Measurable Goals</b>	Responsible		Ta	rget Ye	ear	
	Party	2024	2025	2026	2027	2028
Maintain the post-construction SMP inventory.	SMO/SWMP	✓				
	Coordinator	•				
Develop and implement a post-construction SMP	SMO/High	✓				
inspection and maintenance program	way Dept.	•				
Document names of individuals who received post-	SMO/SW	<b>√</b>				
construction SMP inspection and maintenance	MP	•				
procedure training.	Coordinato					
	r					
The SMO to assess all activities that do not appear to	SMO					
comply with Village ordinances, permits and	SIVIO	<b>✓</b>				
certificates of occupancy. The SMO can order						
corrective measures and issue summonses for						
violations of all activities found not to comply with						
Village ordinances including the new Stormwater						
Management and Erosion and Sediment Control and						
the Illicit Discharge ordinances.						
Provide additional training for BI / SMO, new	SWMP	<b>√</b>				
personnel, or professional consultants on new	Officer/BI/					
stormwater mitigation procedures, continue to	SMO					
conduct site inspections, review construction for						
compliance with approved plans, order corrective						
measures and issue violations as required or in						
response to complaints.						
When a SWPPP is required, Village will hire an	Bldg. Dept.	$\checkmark$				
outside consultant to review the SWPPP for						
compliance with NYS standards and to provide						
construction inspection requirements using a						
developer escrow account. Identify hourly costs to						
be charged for the review and inspection of E&SC and SWPPP plans and inspection services. Actual						
costs using hourly costs will be developed based on						
project size and requirements.						
Provide educational training to planning board	SWMP	<b>√</b>				
members and review personnel to identify sites	Officer	▼				
where Erosion and Sediment Control and SWPPP's	Officer					
are required.						

Adjust ordinance fee structure if required.	SWMP Officer	✓		
Amend ordinances when necessary.	SWMP Officer	✓		
Provide copies of new code to all municipal staff with review or inspection responsibilities including Trustees, Board members, BI/SMO, and Village Engineer.	SWMP Officer	✓		
SMO and/or Highway Dept. staff to review complaints for standing water and flooding and add mitigation efforts undertaken to the recordkeeping file.	SMO/High way Dept.	<b>√</b>		
Continue to clean streets four times annually	Highway Dept.	✓		
Inspect drainage structures connected to outfalls annually – clean when needed.	Highway Dept.	<b>√</b>		
Clean basins as needed when complaints are received	Highway Dept.	<b>√</b>		

Village Staff that have Received Post Construction SMPs Inspection & Maintenance Training (pending)				
Name	Title	Contact Information		
Gerald Peters	Building Inspector/ Superintendent DPW	gpeters@newvillageofislandia.com		
Keith Kellner	Building Inspector/ Plans Examiner	kkellner@newvillageofislandia.com		

#### MCM 5 Required Annual Reporting

Compile required reporting including:

- Number and type of enforcement actions;
- Number and type of post-construction SMPs inventoried;
- Number and type of SMPs inspected;
- Number and type of SMPs maintained;
- Provide certification that regulatory mechanism is equivalent to NYSDEC Sample Local Law;
- Educational programs attended, date, subject, and personnel; and
- Report program effectiveness, and assess BMP and measurable goals in addition to the above list to include:
  - List of educational materials distributed related to E&SC and SWPPP
  - Training record of Village personnel and consultants providing E&SC and SWPPP review and inspection
  - o Property owners notified of E&SC and SWPP issues on their properties
  - Maintain list of sites and improvement undertaken.

#### 2.6 MCM 6 - POLLUTION PREVENTION AND GOOD HOUSEKEEPING

The Pollution Prevention and Good Housekeeping MCM consists of BMPs that focuses on reduction of pollutants from municipal operations through employee training and operational changes. The BMPs describe the training needs, operational and maintenance BMPs, maintenance activities, inspection procedures and schedules, pollutant control measures from Village streets, municipal parking lots, maintenance yards and Village waste disposal.

Under this minimum measure, the Village will:

- Develop and implement a pollution prevention/good-housekeeping program for municipal operations and facilities that have the potential to contribute pollutants of concern to MS4's contributing to the surface waters or directly to surface waters. Municipal operations and facilities may include maintenance of roads, winter roads, stormwater systems, Village vehicles, municipal buildings, parks and open space, rights-of-way and management of solid waste disposal, land disturbance, and marine habitat modifications;
- Determine the standard practices and operating procedures to reduce or prevent pollution discharge as described in the "NYS Pollution Prevention and Good Housekeeping Assistance" document. Prioritize the municipal efforts based on proximity to surface waters, potential for improvement, need and Village capability;
- Once every five years perform a self-assessment of the municipal operations to assess pollutant sources changes and needed modification to municipal operations;
- Update the municipal pollution prevention and good housekeeping operations by prioritizing efforts based on geographic area, potential for water quality improvement, facilities or operation most in need of improvement, and permittee's capabilities;
- Utilize employee pollution prevention and good housekeeping training programs;
- Require third party contractors performing Village services such as street sweeping, snow removal, lawn and grounds care to meet pollution prevention and good housekeeping training requirements;
- If municipal operation are identified that would otherwise be required to obtain a NYS Multisector General Permit (MSGP GP 0-23-001) for industrial stormwater permit, the Village must prepare and implement provisions of the SWMP that comply with Parts III of the MSGP, along with monitoring and recordkeeping in accordance with Part IV of the MSGP. Discharge monitoring reports must be attached to MS4 annual report;
- Periodically assess MCM and modify measurable goals if deemed necessary for continued stormwater pollution reduction; and
- Select appropriate pollution prevention and good housekeeping BMPS and measurable goals to
  ensure reduction to ensure reduction of any POCs in stormwater discharges to the maximum
  extent practicable if compliance with TMDL requirements mandate watershed improvement
  strategies.
- Adopt techniques to reduce the use of fertilizers and pesticides through Integrated Pest Management.

#### Existing Program Compliance

The Village has developed a program of municipal operations and good housekeeping BMPs to reduce the pollution impacts from stormwater discharges on waterbodies, identified POCs and their sources and identified steps that the Village is taking in reducing pollutants in runoff. The municipal operations and good housekeeping program included the following procedures to assess illicit discharges within the watershed:

- 1. Drainage structures that are connected to outfalls to surface waters shall be inspected annually and cleaned as needed or following receipt of complaint. Highway staff currently reviews structures and notes condition on a spreadsheet if repairs are needed.
- 2. Annual street sweeping events increased to four times a year.
- 3. Dog waste control requirements are included in the local ordinance.
- 4. Distribution of solid waste collection procedures document.
- 5. Yard debris pickup is conducted weekly and all materials must be contained to prevent debris from being left in street. Uncontained materials are not allowed and are subject to enforcement.
- 6. Expanded code enforcement to 24-hour coverage.
- 7. SMO provides solid waste pick-up enforcement.
- 8. Municipal storage areas were reviewed for potential stormwater runoff to surface waters or connected drainage systems; none were identified
- 9. Dog waste bag stations were installed in the Village.

#### MCM 6: Program Compliance Continuation

Activities and Measurable Goals	Responsible	Target Year				
	Party	2024	2025	2026	2027	2028
Village personnel and consultants will attend educational or training programs related to pollution reduction. New employees will be informed of pollution prevention and good housekeeping measures and will attend training classes when available.	BI/SMO/Highway Dept./SWMP Officer	✓				
Village personnel will maintain access to the "NYS Pollution Prevention and Good Housekeeping Assistance" document in the office. New related documents will be provided as they become available.	SWMP Officer	✓				
Document all Village operations that can reduce pollutant impacts into waterways such as street sweeping, structures cleaning, stream bank restoration; in addition, to documenting all materials distributed. This will allow the SWMP Annual Report to be completed with less effort.	DPW Dept./ Storm Water Consultant	<b>✓</b>				
Once every three years perform a self- assessment of municipal operations and contractor operations addressed by the SWMP to identify changes in pollution generation and required modification in municipal operation for pollution prevention and good housekeeping.	SWMP Officer			✓		
Undertake ongoing inspection and maintenance, repairs and or replacement of catch basins and manhole sumps and outfalls in the early spring and late fall for removal of sediment and debris.	SMO/ SWMP Officer	✓				
Develop a Corrective Action Plan for any conveyance system component identified to require improvement and maintain a file of corrective actions.	Highway Dept.	✓				
Undertake the inspection and maintenance,	Highway Dept.	✓				

repairs and or replacement SMPs installed by					
the permittee.					
Follow IPM practices for landscape maintenance	Highway Dept.	✓			
and require that contracted landscape services					
follow the IPM practices including:					
• Train employees or require training of					
contractor staff in proper lawn care					
product application and improvements					
in maintenance practices					
• Use slow release fertilizers when					
possible					
Adhere to the Suffolk County law					
banning fertilizer applicable on existing					
lawns from November 1 to April 1.					
Identify potential opportunities to use					
Low Impact Development (LID)					
options for storm runoff including					
municipal roof runoff for plant					
watering and parking and directing					
road drainage to rain gardens.	Highway Dans				
Follow vehicle and equipment maintenance BMP procedures including:	Highway Dept.	✓			
An inventory of municipal vehicle and equipment					
1 1					
Inspection of vehicle and equipment for fluid leaks					
Require that maintenance not be  acreduated where grillege apple.					
conducted where spillage could discharge or drain to surface water					
_					
Clean spills immediately using dry materials					
Dispose of wastes at recycling centers					
or legal disposal locations.					
<ul> <li>Maintain vehicles in conformance with</li> </ul>					
manufacturer service requirements, maintain vehicle maintenance records,					
and leak repair activities.					
=					
Vehicle washing shall not drain to surface waters.					
<ul> <li>Conduct maintenance activities at</li> </ul>					
buildings so that materials cannot be					
carried to surface waters.					
Follow BMP to prevent the potential for	Highway Dept.	1			
discharge of hazardous and waste materials from	Inghway Dept.	🕶			
impacting surface waters by:					
Materials are stored in closed					
containers away from surface waters or					
drains to surface waters.					
<ul> <li>Use of non-hazardous materials, when</li> </ul>					
possible.					
<ul> <li>Recycle when possible or properly and</li> </ul>					
legally dispose of hazardous materials.					
Provide self-containment areas to					
prevent produce leaching if possibility					
prevent produce leaching it possibility	I	l .	l		

is identified.				
Post no dumping signs in sensitive				
locations and where dumping has been				
observed.				
Develop spill response procedures,				
maintain spill prevention material and				
conduct municipal training.	III 1 D			
Follow road maintenance and cleaning	Highway Dept.	✓		
procedures including:				
Sweep streets four times per year to reduce sediment and associated				
pollutant discharge to surface waters.				
Clean up reported fluid leaks and spills  on Village reads that drain to gurfage.				
on Village roads that drain to surface				
waters as soon as possible after				
reported.				
<ul> <li>Require street sweeping contractor to follow BMPs and legally and properly</li> </ul>				
dispose of collected material.				
Require paving contractor to follow				
road paving BMPs including erosion				
and sedimentation control and allow				
paving only during dry weather.				
<ul> <li>Investigate alternative pervious paving</li> </ul>				
materials for possible use on Village				
properties.				
Require contractor to follow BMPs for salt	Highway Dept.	_/		
application operations to reduce impact of salt	ingiway Depa	•		
on surface waters, aquatic life and vegetation. If				
salt materials are required to be stored within the				
Village boundaries, proper covered storage				
facilities should be developed.				
Follow storm drainage system inspection and	Highway Dept.	1		
cleaning procedure to routinely cleans municipal				
structures focusing on the system that discharges				
to Connetquot River, those area that routinely				
become clogged and those locations where				
flooding is reported.				
Comply with the Stormwater Management and	Highway	<b>✓</b>		
Erosion and Sedimentation Control section of	Dept./SWMP			
the Village code for all Village construction	Officer			
projects.				

#### MCM 6 Required Annual Reporting

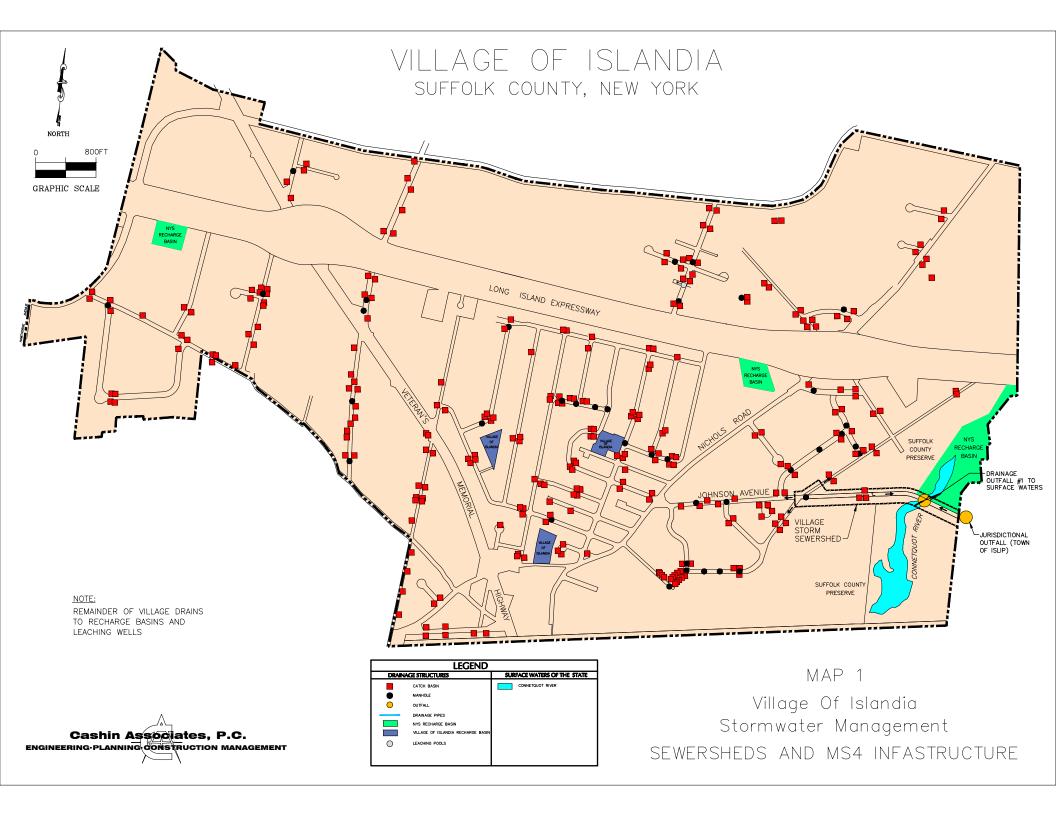
Compile required reporting including:

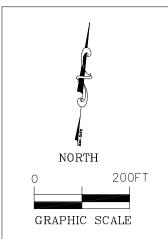
- Indicate all municipal operations and facilities that the MCM program assessed.
- Describe management practices, policies and procedures developed and/or implemented and reported on including:
  - Miles of street swept and acres of parking lot;
  - Number of catch basins inspected and number cleaned;

- Number and type of post-construction control SMP inspected and number cleaned;
- Pounds of phosphorus and nitrogen fertilizer applied;
- Pounds of pesticides applied;
- Staff training events attended and number of staff trained; and
- Report program effectiveness, and assess BMP and measurable goals in addition to the above list to include:
  - o Review and update O&M procedures as Village operations change
  - o Track structural BMP installation, inspection and cleaning.

## **APPENDIX 1**

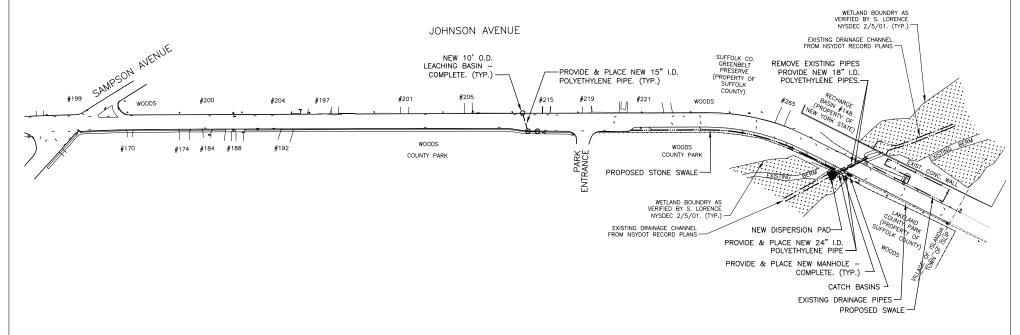
Village Of Islandia
Outfall and Storm Sewershed Map
Zoning Map
Area Tax Map





### VILLAGE OF ISLANDIA

SUFFOLK COUNTY, NEW YORK

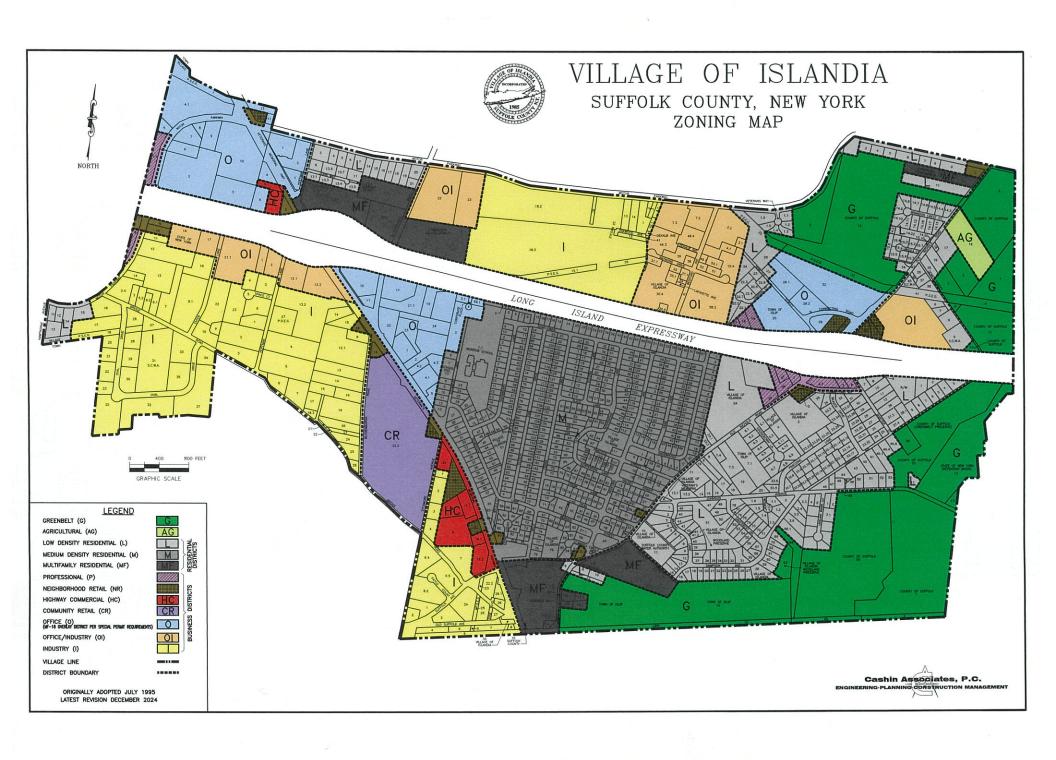


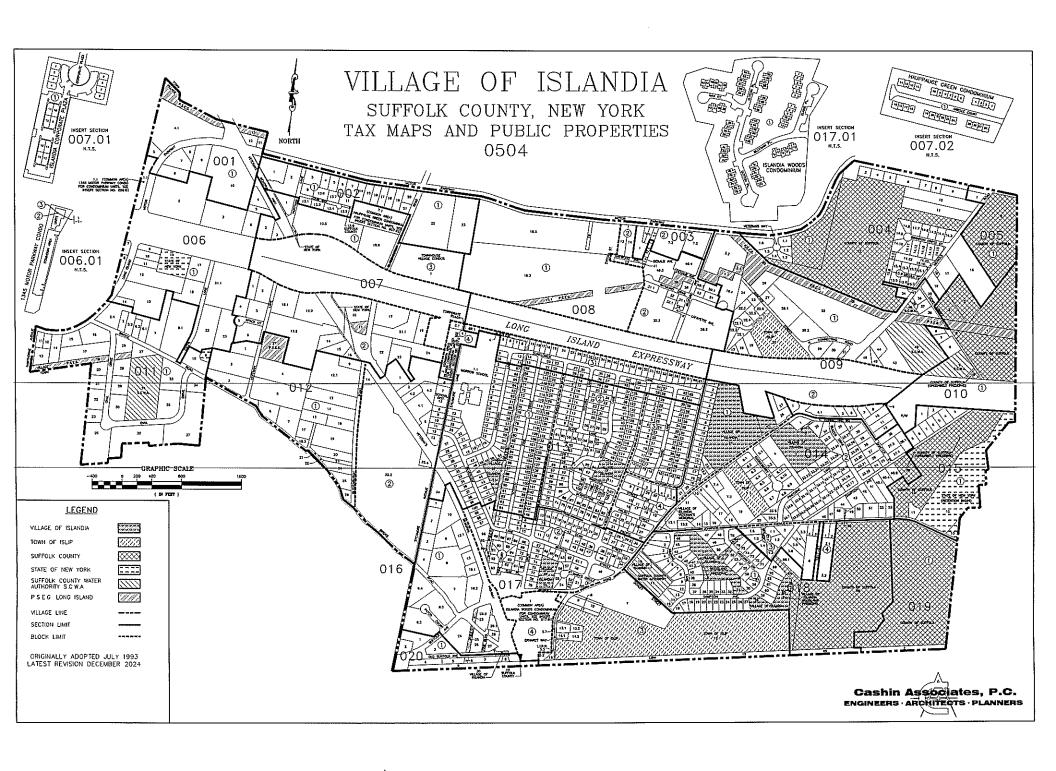
MAP 2

Village Of Islandia Stormwater Management

OUTFALL #1 STORM DRAINAGE SYSTEM

Cashin Associates, P.C.





# **APPENDIX 2**

SPDES General Permit for Stormwater Discharges

From

Municipal Separate Storm Sewer Systems (MS4s) (Permit No. GP-0-24-001)



**FINAL** 

**PERMIT** 

for

**NEW YORK STATE** 

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT

for

STORMWATER DISCHARGES

from

MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Permit No. GP-0-24-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70 of the Environmental Conservation Law

Issuance Date: December 13, 2023

Effective Date: January 3, 2024 Expiration Date: January 2, 2029

Scott Sheeley

Chief Permit Administrator

Authorized Signature

Address: NYS DEC

Division of Environmental Permits

625 Broadway, 4th Floor

Albany, NY 12233

Date

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### **NOTE**

All italicized words within this *State Pollutant Discharge Elimination System (SPDES)* general permit are defined in Appendix A.

# Part I. Permit Coverage and Limitations

# A. Permit Authorization

This *SPDES* general permit authorizes the *discharge* of *stormwater* from small *MS4*s.

- 1. An MS4 Operator is eligible for coverage under this SPDES general permit if the MS4 is automatically or additionally designated (Appendix B).
  - Only portions of the *MS4* which are located within the *automatically* or *additionally designated areas* are subject to, and authorized to *discharge* by, the requirements of this *SPDES* general permit (Part IV.C.).
- This SPDES general permit contains terms and conditions specific for each of the following types of MS4 Operators that are authorized to discharge under this SPDES general permit, in accordance with Part I.A.1:
  - a. Traditional Land Use Control MS4 Operators;
  - b. Traditional Non-land Use Control MS4 Operators; and
  - c. Non-traditional MS4 Operators.

The minimum control measures (MCMs) for traditional land use MS4 Operators are listed in Part VI. The MCMs for traditional non-land use control MS4 Operators and non-traditional MS4 Operators are listed in Part VII. Part III.B, Part VIII, and Part IX. list additional requirements for all MS4 Operators' MS4s discharging to impaired waters.

3. Non-stormwater discharges through outfalls listed in Part 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR) 750-1.2(a)(29)(vi) and 40 CFR 122.34(b)(3)(ii), are authorized by this SPDES general permit provided they do not violate Environmental Conservation Law (ECL) Section 17-0501. If the Department or MS4 Operator determines that one or more of the discharges are in violation of ECL Section 17-0501, the identified discharges are illicit and the MS4 Operator must eliminate such discharges by following the illicit discharge MCM requirements found in Part VI.C. or Part VII.C, depending on the MS4 Operator type.

*Discharges* from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned.

# **B. Exemption and Limitations on Coverage**

- 1. The following *discharges* from *MS4 Operators* are exempt from the requirements of this *SPDES* general permit:
  - a. Stormwater discharges associated with an industrial activity provided the discharges are covered by the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-23-001 (MSGP); and
  - b. Individual *SPDES* permitted *stormwater discharges* provided the *discharges* are in compliance with their individual *SPDES* permit limitations.
- 2. The following *discharges* from *MS4 Operators* are not authorized by this *SPDES* general permit:
  - a. Stormwater discharges that may adversely affect an endangered or threatened species, or its designated critical habitat, unless the MS4 Operator has obtained a permit issued pursuant to 6 NYCRR Part 182 or the Department has issued a letter of non-jurisdiction.
  - b. Stormwater discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places unless the covered entity is in compliance with requirements of the National Historic Preservation Act and has coordinated with the appropriate State Historic Preservation Office any activities necessary to avoid or minimize impacts.
  - c. *Stormwater discharges*, the permitting of which is prohibited under 40 CFR 122.4 and 6 NYCRR 750-1.3.
  - d. The *discharge* of vehicle and equipment washwater from *municipal facilities*, including tank cleaning operations.
- 3. All documentation necessary to demonstrate *discharge* eligibility (Part I.B.1. and Part I.B.2.) must be documented in the *Stormwater Management Program Plan* (SWMP Plan) (Part IV.B.).

# Part II. Obtaining Permit Coverage

A. *MS4 Operators*, meeting the eligibility requirements in Part I.A.1. of this *SPDES* general permit, must submit the notice of intent (NOI) electronically (eNOI) unless the *MS4 Operator* has obtained a waiver from the electronic submittal requirement (Part II.B.) in order to be authorized to *discharge* under this *SPDES* general permit. Access and directions for use, for electronic submission of the NOI, are located on the *Department*'s website. *MS4 Operators* must submit the eNOI as indicated in Table 1 and in accordance with Part X.J.

Table 1. eNOI Submittal for Permit Coverage				
Type of permit coverage	Deadline to submit complete eNOI	Effective Date of Coverage (EDC)	Form to file with the Department	
Newly designated  MS4 Operator	180 days <sup>1</sup> from written notification from the <i>Department</i>	The submission of the complete eNOI	eNOI	
MS4 Operators continuing coverage from GP-0-15-003	Forty-five (45) days from the effective date of the permit (EDP)	EDP	eNOI	

*MS4 Operators* continuing coverage from GP-0-15-003 are eligible for continued coverage under this SPDES general permit (GP-0-24-001) on an interim basis for up to sixty (60) calendar days from the EDP. During this interim period, an MS4 Operator must comply with the requirements of GP-0-15-003.

By submitting the complete eNOI, the MS4 Operator certifies that the MS4 Operator has read and agrees to comply with the terms and conditions of this SPDES general permit including the provisions to update the SWMP Plan (Part IV.B.) in accordance with the timeframes set forth in this SPDES general permit.

MS4 Operators must document the complete NOI in the SWMP Plan (Part IV.B.). As information in the completed NOI changes, within thirty (30) days, the MS4 Operators must update the information on the NOI and resubmit the completed NOI to the Department. The MS4 Operator must document information from the Department acknowledging previous coverage or designation in the SWMP Plan (Part IV.B.).

Where there is a permit condition to *develop*, newly designated *MS4 Operators* must create that permit requirement. Where there is a permit condition to *develop*, *MS4 Operators* continuing coverage must continue to implement their current *SWMP* and update the *SWMP* to comply with the permit requirement.

For newly designated *MS4 Operators*, timeframes for compliance begin on the effective date of coverage (EDC).

#### B. Electronic Submission Waiver

- 1. *MS4 Operators* must submit all NOIs electronically unless the *MS4 Operator* has received a waiver from the Department based on one of the following conditions:
  - a. If the *MS4 Operator* is physically located in a geographical area (i.e., zip code or census tract) that is identified as under-served for broadband internet

3

<sup>&</sup>lt;sup>1</sup> In this *SPDES* general permit, days refer to calendar days.

- access in the most recent report from the Federal Communications Commission; or
- b. If the *MS4 Operator* has limitations regarding available computer access or computer capability.
- 2. If an *MS4 Operator* wishes to obtain a waiver from submitting an NOI electronically, the *MS4 Operator* must submit a request using the Application for Electronic Submittal Waiver to the *Department* at the following address:

NYS DEC Bureau of Water Compliance

MS4 NOTICE OF INTENT WAIVER

625 Broadway, 4th Floor

Albany, New York 12233-3505

- 3. A waiver may only be considered granted once the *MS4 Operator* receives written confirmation from the *Department*.
- 4. *MS4 Operators* must document the eNOI waiver in the *SWMP Plan* (Part IV.B.), if applicable.
- C. *MS4 Operators* who submit a complete NOI are authorized to *discharge stormwater* under the terms and conditions of this *SPDES* general permit.
  - 1. NOI Content

The NOI shall include:

- a. Legal name and address of the MS4 Operator;
- b. Receiving waterbodies; and
- c. *Municipal Separate Storm Sewer System (MS4)* NPDES Permit-Related Information of 40 CFR Part 127 Appendix A.

# **Part III. Special Conditions**

# A. Discharge Compliance with Water Quality Standards

- 1. The MS4 Operator must implement the required controls contained in Part III. through Part IX. of this SPDES general permit. The Department expects that compliance with the terms and conditions of this SPDES general permit will assure MS4 discharges meet applicable water quality standards.
- 2. It shall be a violation of the ECL for any *discharge* authorized by this *SPDES* general permit to either cause or contribute to a violation of *water quality standards* as contained in 6 NYCRR 700-705.
- 3. The MS4 Operator must take all necessary actions to ensure discharges comply with the terms and conditions of this SPDES general permit. If at any time an MS4 Operator becomes aware (e.g., through self-monitoring or by notification from the Department) that a discharge causes or contributes to the violation of an applicable water quality standard, the MS4 Operator must implement corrective

- actions and the *MS4 Operator* must document these actions in the *SWMP Plan* (Part IV.B.).
- 4. Compliance with this *SPDES* general permit does not preclude, limit, or eliminate any enforcement activity as provided by Federal and/or State law. Additionally, if violations of applicable *water quality standards* occur, then coverage under this *SPDES* general permit may be terminated by the *Department* in accordance with 6 NYCRR 750-1.21(e), and the *Department* may require an application for an alternative *SPDES* general permit or an individual *SPDES* permit may be issued.

# B. Water Quality Improvement Strategies for Impaired Waters

## 1. List of Impaired Waters (Appendix C)

Part VIII. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

For MS4 Operators whose MS4 outfalls and additionally designated area MS4 outfalls (ADA MS4 outfalls) discharge to waters impaired for phosphorus, silt/sediment, pathogens, nitrogen, or floatables (Appendix C), the MS4 Operator must develop and implement the pollutant specific best management practices (BMPs), listed in Part VIII, targeted towards the pollutant of concern (POC) causing the impairment.

For MS4 Operators discharging to waters within a total maximum daily load (TMDL) watershed that does not specify a pollutant load reduction necessary for MS4s and listed in Appendix C, the MS4 Operator must implement the enhanced BMP requirements of Part VIII. for the applicable pollutant of concern of the TMDL.

The enhanced *BMP* requirements in Part VIII. are written to address the *POCs* listed in Table 2.

Table 2. <i>Pollutant</i> Specific BMPs for Impaired Waters listed in Appendix C			
POC	Part VIII. Reference		
Phosphorus	A		
Silt/Sediment	В		
Pathogens	С		
Nitrogen	D		
Floatables	E		

# 2. Watershed Improvement Strategy Requirements for *TMDL* Implementation (Part IX.)

Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

a. MS4 Operators discharging to waters within the watersheds listed in Table 3 must implement additional BMPs and applicable retrofit plans as specified in Part IX. to achieve the pollutant load reductions specified in the referenced TMDL or respective implementation plan.

Table 3. Approved <i>TMDL</i> Watersheds with <i>MS4</i> Contribution			
TMDL	POC	Part IX. Reference	
Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000			
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel, October 2016	Phosphorus	Α	
Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake, March 2015			
Impaired Waters Restoration Plan for Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, September 2005			
Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012	Phosphorus	В	
Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008			
None	Pathogen	С	
TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries, September 2007	Nitrogen	D	

b. Each MS4 Operator is responsible for a waste load reduction as specified in the applicable TMDL or TMDL implementation plan referenced in Part IX. MS4 Operators may form a Regional Stormwater Entity (RSE) to implement stormwater retrofits collectively where compliance with the pollutant reduction requirements would be achieved on a regional basis. The individual load reduction for each participating MS4 Operator is aggregated to create a RSE load reduction. The RSE then designs and installs retrofits where they are most feasible within the boundaries of the RSE. Each participating MS4

Operator of an RSE complies if the aggregated RSE pollutant load reduction is met.

# 3. Impaired waters with an approved TMDL and listed in Appendix C

Part VIII. and Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

An *MS4 discharging* to a waterbody listed in Appendix C must meet the requirements of Part VIII. for the *POC*(s) listed in Appendix C.

An *MS4 discharging* to a waterbody listed in Table 3 must meet the requirements of Part IX. for the specific *POC* identified in the *TMDL*.

# Part IV. Stormwater Management Program (SWMP) Requirements

MS4 Operators must develop, implement, and enforce a SWMP. The SWMP must be retained in written format, hardcopy or electronic. The written SWMP is referred to as the SWMP Plan (Part IV.B.). The MS4 Operator must use the SWMP Plan (Part IV.B.) to document developed, planned, and implemented elements of the SWMP.

#### A. Administrative

# 1. Alternative Implementation Options

- a. MS4 Operators may utilize other entities or the resources of those entities to assist with any portion of the SWMP development, implementation, or enforcement. These entities may consist of other MS4 Operators, an RSE, a Coalition of MS4 Operators, other public entities (e.g., non-MS4 Operators), or a private third-party contractor. If the MS4 Operator is relying upon another entity for compliance with any portion of this SPDES general permit, there must be an agreement in place that:
  - i. Is legally binding;
  - ii. Is documented in writing;
  - iii. Is signed and dated by all parties including a certification statement that explains that the *MS4 Operator* is responsible for compliance with this *SPDES* general permit;
  - iv. Identifies the activities that the entity will be responsible for including the particular MCM, the location and type of work;
  - v. Includes the name, address, and telephone number of the contact person representing the entity;
  - vi. Is kept up-to-date and part of the SWMP Plan; and
  - vii. Is retained by each party for the duration of the permit term.

Part IV.A.

- b. In the SWMP Plan, the MS4 Operator must develop and maintain an inventory of entities assisting in permit implementation that includes the following information:
  - i. Name of entity performing permit implementation; and
  - Permit requirement being implemented performed by entity.
- c. Irrespective of any agreements, each party remains legally responsible for obtaining its own permit coverage, for filing the *NOI*, and satisfying all requirements of this *SPDES* general permit for its own *discharges*.
- d. Within thirty (30) days signing, alternative implementation agreements (Part IV.A.1.) must be documented in the *SWMP Plan* (Part IV.B.).
- e. Annually review and update any alternative implementation agreements in the *SWMP Plan*, as necessary.

## 2. Staffing plan/Organizational chart

Individual *SWMP* components may be *developed*, implemented, or enforced by different titles associated with the *MS4 Operator*, or other entities as described in Part IV.A.1. Within six (6) months of the EDC, the *MS4 Operator* must *develop* a written staffing plan/organizational chart which includes job titles and other entities as identified in Part IV.A.1, and the roles and responsibilities for each corresponding to the required elements of the *SWMP*. The staffing plan must describe how information will be communicated and coordinated among all those with identified responsibilities. All staffing plan/organization charts must be documented in the *SWMP Plan* (Part IV.B.).

#### B. SWMP Plan

The SWMP Plan must contain, at a minimum, all permit requirements implemented to meet the terms and conditions of this SPDES general permit, and documentation required by this SPDES general permit. The SWMP Plan may incorporate by reference any documents that meet the requirements of this SPDES general permit. If an MS4 Operator relies upon other documents to describe how the MS4 Operator will comply with the requirements of this SPDES general permit, the MS4 Operator must attach to the SWMP Plan a copy of these documents.

The SWMP Plan must identify if any requirements from Part VI. through Part IX. do not require updates and include the rationale behind the determination. The SWMP Plan must identify if any requirements from Part VI. through Part IX. are not applicable and include the rationale behind the determination

## 1. Stormwater Program Coordinator

On the NOI, the MS4 Operator must designate a Stormwater Program Coordinator who must be knowledgeable in the principles and practices of stormwater management, the requirements of this SPDES general permit, and the SWMP. The Stormwater Program Coordinator oversees the development, implementation, and enforcement of the SWMP; coordinates all elements of the

Part IV.B.

SWMP to ensure compliance with this SPDES general permit; and develops and submits the Annual Report (Part V.B.2.). The name, title, and contact information of the Stormwater Program Coordinator must be documented in the SWMP Plan.

# 2. Availability of SWMP Plan

- a. Within six (6) months of the EDC, the *MS4 Operator* must make the current *SWMP Plan*, and documentation associated with the implementation of the *SWMP Plan*, available during normal business hours to the *MS4 Operator*'s management and staff responsible for implementation as well as the *Department* and United States Environmental Protection Agency (USEPA) staff.<sup>2</sup> The completion of this permit requirement must be documented in the *SWMP Plan*.
- b. Within six (6) months of the EDC, the *MS4 Operator* must make a copy of the current *SWMP Plan* available for public inspection during normal business hours at a location that is accessible to the public or on a public website. The location of the *SWMP Plan* must be kept current. The completion of this permit requirement must be documented in the *SWMP Plan*.

# 3. Timeframes for SWMP Plan Development or Updates

MS4 Operators must develop and implement their SWMP Plan in accordance with the timeframes set forth in this SPDES general permit. Annually, after the end of the Reporting Year and by April 1, the SWMP Plan must be updated to ensure the permit requirements are implemented. More frequent updates to the SWMP Plan are noted throughout this SPDES general permit in specific permit requirements.

# C. Minimum Control Measures (MCMs)

The MCMs for *traditional land use MS4 Operators* are listed in Part VI. while those for *traditional non-land use control MS4 Operators* and *non-traditional MS4 Operators* are listed in Part VII. Parts III.B, Part VIII, and Part IX. list additional requirements for all *MS4 Operators discharging* to impaired waters.

#### MS4 Operators subject to Part VI.

For *MS4 Operators* subject to Part VI. requirements, all MCMs must be implemented within the *automatically designated area* or an *additionally designated area* subject to Criterion 1 or 2 of the Additional Designation Criteria (Appendix B).

For *MS4 Operators* subject to Part VI. requirements, MCM 4 and MCM 5 must also be implemented within an *additionally designated area* subject to Criterion 3 of the Additional Designation Criteria (Appendix B).

## MS4 Operators subject to Part VII.

For MS4 Operators subject to Part VII. requirements, all MCMs must be implemented within the automatically designated area or an additionally designated area subject to Criterion 1 or 2 of the Additional Designation Criteria (Appendix B).

<sup>&</sup>lt;sup>2</sup> Part X.F. contains the duty for the *MS4 Operator* to provide information.

### MS4 Operators subject to Part VIII.

Part VIII. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

For all MS4 Operators subject to Part VIII. requirements, all MCMs must be implemented within the automatically designated area.

For *MS4 Operators* subject to Part VI. requirements and subject to Part VIII. requirements, MCM 4 and MCM 5 must also be implemented within an *additionally designated area* subject to Criterion 3 of the Additional Designation Criteria (Appendix B).

### MS4 Operators subject to Part IX.

Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type.

For all MS4 Operators subject to Part IX. requirements, all MCMs must be implemented within the automatically designated area or an additionally designated area subject to Criterion 1 of the Additional Designation Criteria (Appendix B).

# D. Mapping

The MS4 Operator must develop and maintain comprehensive system mapping to include the mapping components within the MS4 Operator's automatically designated area or an additionally designated area subject to Criterion 1 or 2 of the Additional Designation Criteria (Appendix B), unless otherwise specified. The comprehensive system mapping must be documented in the SWMP Plan. The comprehensive system mapping must be in a readily accessible format, with scale and detail appropriate to provide a clear understanding of the MS4, to serve as a planning tool to allow for prioritization of efforts and facilitate management decisions by the MS4 Operator. Annually, after Phase I (Part IV.D.2.a.) completion, the MS4 Operator must update the comprehensive system mapping including updates to prioritization information of monitoring locations (Part VI.C.1.d. or Part VII.C.1.d, depending on the MS4 Operator type), construction sites (Part VI.D.5. or Part VII.D.5, depending on the MS4 Operator type), and municipal facilities (Part VI.F.2.c.i. or Part VII.F.2.c.i, depending on the MS4 Operator type).

- 1. Within six (6) months of the EDC, the comprehensive system mapping must include the following information:
  - a. MS4 outfalls (as required for MS4 Operators continuing coverage from previous iterations of this SPDES general permit);
  - b. *Interconnections* (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit);
  - c. Preliminary *storm-sewershed* boundaries (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit);

- d. *MS4* infrastructure (as required for *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit that were subject to Part IX.A. or Part IX.D.), including:
  - i. Conveyance system
    - a) Type (closed pipe or open drainage);
    - b) Conveyance description for closed pipes (material, shape, dimensions);
    - c) Conveyance description for open drainage (channel/ditch lining material, shape, dimensions); and
    - d) Direction of flow;
  - ii. Culvert crossings (location and dimensions)
  - iii. Stormwater structures
    - a) Type (drop inlet, catch basin, or manhole); and
    - b) Number of connections to *catch basins*, and manholes;
- e. Basemap information:
  - i. Automatically<sup>3</sup> and additionally designated areas (based on criterion 3 of Additional Designation Criteria in Appendix B);<sup>4</sup>
  - ii. Names and location of all surface waters of the State, including:
    - a) Waterbody classification;<sup>5</sup>
    - b) Waterbody Inventory/Priority Waterbodies List (WI/PWL);6
      - i) Impairment status; and
      - ii) POC, if applicable;
    - c) TMDL watershed areas;7
  - iii. Land use, including:
    - a) Industrial;
    - b) Residential;
    - c) Commercial;
    - d) Open space; and
    - e) Institutional;
  - iv. Roads: and
  - v. Topography.8
- 2. The comprehensive system mapping must be updated with the data collected for each phase of mapping within the timeframe for each phase as outlined below:
  - a. Phase I: Within three (3) years of the EDC, the comprehensive system mapping must include the following information:

<sup>&</sup>lt;sup>3</sup>Utilizing the Stormwater Interactive Map on the Department's website or the NYS GIS Clearinghouse.

<sup>&</sup>lt;sup>4</sup>Utilizing the Stormwater Interactive Map on the Department's website.

<sup>&</sup>lt;sup>5</sup>Utilizing the Stormwater Interactive Map on the Department's website or the NYS GIS Clearinghouse.

<sup>&</sup>lt;sup>6</sup>Utilizing the Stormwater Interactive Map on the Department's website or the NYS GIS Clearinghouse.

<sup>&</sup>lt;sup>7</sup>Utilizing the Stormwater Interactive Map on the Department's website.

<sup>&</sup>lt;sup>8</sup> Utilizing USGS Quadrangle Map or finer.

- Monitoring locations, with associated prioritization (Part VI.C.1.d. or Part VII.C.1.d, depending on the MS4 Operator type);
- ii. Preliminary *storm-sewershed* boundaries (for newly designated *MS4 Operators*);
- iii. Focus areas (Part VI.A.1.a. or Part VII.A.1.a, depending on the *MS4 Operator* type);
- iv. Publicly owned/operated post-construction stormwater management practices (SMPs) (Part VI.E.3. or Part VII.E.3, depending on the MS4 Operator type). The publicly owned/operated post-construction SMPs subject to this requirement are in the automatically designated area or an additionally designated area subject to Criterion 1, 2, or 3 of the Additional Designation Criteria (Appendix B); and
- v. *Municipal facilities,* with associated prioritization (Part VI.F.2.c. or Part VII.F.2.c, depending on the *MS4 Operator* type).
- b. Phase II: Within five (5) years of the EDC, the comprehensive system mapping must include the following information:
  - i. MS4 infrastructure, including:
    - a) Conveyance system
      - i) Type (closed pipe or open drainage); and
      - ii) Direction of flow;9
    - b) Stormwater structures
      - i) Type (drop inlet, catch basin, or manhole); and
      - ii) Number of connections to and from drop inlets, *catch basins*, and manholes;
  - ii. Privately owned/operated post-construction SMPs which discharge to the MS4 (Part VI.E.2.). The privately owned/operated post-construction SMPs subject to this requirement are in the automatically designated area or an additionally designated area subject to Criterion 1, 2, or 3 of the Additional Designation Criteria (Appendix B).
    - a) If the location of the privately-owned post-construction SMPs cannot be determined without accessing the private property, the *MS4*Operator must map the location of the property that the post-construction SMP is located on using street address or tax parcel.

# E. Legal Authority

For *MS4 Operators* continuing coverage from previous iterations of this *SPDES* general permit, adequate legal authority must be maintained in accordance with Part IV.E.1. or Part IV.E.2.

For a newly designated *MS4 Operator*, within three (3) years, the *MS4 Operator* must, to the extent allowable by State and local law, *develop* and implement

<sup>&</sup>lt;sup>9</sup> Direction of flow can be a written description or indicated as an arrow on the feature.

adequate legal authority to control *pollutant discharges* to implement this *SPDES* general permit. An *MS4 Operator* must either be in conformance with Part IV.E.1. or Part VI.E.2:

- 1. Adopt the following model local laws and include a copy of the resolution in their *SWMP Plan*:
  - a. The New York State Department of Environmental Conservation Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems, April 2006 (NYS DEC Model IDDE Local Law 2006); and
  - b. The New York State Department of Environmental Conservation Sample Local Law for Stormwater Management and Erosion & Sediment Control, March 2006 (NYS DEC Sample SM and E&SC Local Law 2006).
- 2. Enact a legal mechanism or ensure that written policies/procedures are in place with content equivalent to the model local law, with documentation in the SWMP Plan from the attorney representing the MS4 Operator of the equivalence. Equivalent legal mechanisms or written policies/procedures must include the following:
  - a. For illicit discharges:
    - i. A prohibition of:
      - a) Illicit discharges, spills or other release of pollutants;
      - b) Unauthorized connections into the *MS4*;
    - ii. A mechanism to:
      - a) Receive and collect information related to the introduction of *pollutants* into the *MS4*;
      - b) Require installation, implementation, and maintenance of post-construction *SMPs*;
      - c) Require compliance and take enforcement action; and,
      - d) Access property for inspection.
  - b. To be adequate the legal mechanism must also ensure:
    - Applicable construction activities are effectively controlled and include post-construction runoff controls for new development and redevelopment projects; and
    - ii. Post-construction *SMPs* are properly operated and maintained by requiring the following:
      - a) A stormwater pollution prevention plan (SWPPP) with erosion and sediment controls that meets or exceed the New York State, Standards and Specifications for Erosion & Sediment Control, November 2016 (NYS E&SC 2016) and requires post-construction SMPs for applicable construction activity described in Part VI.D.1 in conformance with the

- SPDES General Permit for Stormwater from Construction Activities, GP-0-20-001 (CGP);
- b) Post-construction SMPs as required by CGP meet the sizing criteria specified in the New York State Stormwater Management Design Manual, January 2015 (NYS SWMDM 2015), and performance criteria, or equivalent, including Operation & Maintenance Plans for long term maintenance;
- c) Construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste, all of which may cause adverse impacts to water quality; and
- d) Receive and collect information related to compliance with the approved SWPPP including verification of maintenance of post-construction *SMPs* (if conducted by private entities).

# F. Enforcement Measures & Tracking

# 1. Enforcement Response Plan

Within six (6) months, the *MS4 Operator* must *develop* and implement an enforcement response plan (ERP) which clearly describes the action(s) to be taken for violations that the *MS4 Operator* has enacted for illicit *discharge* (Part VI.C. or Part VII.C, depending on the MS4 Operator type), construction (Part VI.D. or Part VII.D, depending on the MS4 Operator type), and post-construction (Part VI.E. or Part VII.E, depending on the MS4 Operator type). The ERP must be documented in the *SWMP Plan*. The ERP must set forth a protocol to address repeat and continuing violations through progressively stricter responses (i.e., escalation of enforcement) as needed to achieve compliance with the terms and conditions of this *SPDES* general permit.

- a. The ERP must describe how the *MS4 Operator* will use the following types of enforcement responses or combination of responses:
  - i. Verbal warnings;
  - ii. Written notices;
  - iii. Citations (and associated fines);
  - iv. Stop work orders;
  - v. Withholding of plan approvals or other authorizations affecting the ability to *discharge* to the *MS4*; and
  - vi. Additional measures, supported in local legal authorities, such as collecting against the project's bond or directly billing the responsible party to pay for work and materials to correct violations.
- b. Enforcement responses are based on the type, magnitude, and duration of the violation, effect of the violation on the receiving water, compliance history of the operator, and good faith of the operator in compliance efforts.

c. Efforts to obtain a voluntary correction of deficiencies through informal enforcement, such as verbal warnings or written notices, must not exceed sixty (60) days in duration (from the time of the *MS4 Operator's* initial determination until a return to compliance).

## 2. Enforcement Tracking

The *MS4 Operator* must track instances of non-compliance in the *SWMP Plan*. The enforcement case documentation must include, at a minimum, the following:

- Name of the owner/operator of the facility or site of the violation (can be redacted from the publicly available SWMP Plan);
- b. Location of the *stormwater* source (e.g., construction project);
- c. Description of the violation;
- d. Schedule for returning to compliance;
- e. Description of enforcement response used, including escalated responses if repeat violations occur or violations are not resolved in a timely manner;
- f. Accompanying documentation of enforcement response (e.g., notices of noncompliance, notices of violations);
- g. Any referrals to different departments or agencies; and
- h. Date violation was resolved.

# Part V. Recordkeeping, Reporting, and SWMP Evaluation

# A. Recordkeeping

The *MS4 Operator* must keep records required by this *SPDES* general permit for five (5) years after they are generated. Records must be submitted to the *Department* within a reasonable specified time period of a written *Department* request for such information. Documents can be maintained in electronic format if the manner reasonably assures the integrity of the records, in accordance with NYCRR 750-2.5(e)(1). Records, including the NOI and the SWMP Plan, must be made available to the public at reasonable times during regular business hours.

# **B.** Reporting

# 1. Report Submittal

- a. Reports must be submitted electronically to the *Department* using the forms located on the Department's website (http://www.dec.ny.gov/).
- b. Electronic Submission Waiver
  - ii. *MS4 Operators* must submit all reports electronically unless the *MS4 Operator* has received a waiver from the *Department* based on one of the following conditions:

- a) If the *MS4 Operator* is physically located in a geographical area (i.e., zip code or census tract) that is identified as under-served for broadband internet access in the most recent report from the Federal Communications Commission; or
- b) If the *MS4 Operator* has limitations regarding available computer access or computer capability.
- iii. If an *MS4 Operator* wishes to obtain a waiver from submitting a report electronically, the *MS4 Operator* must submit a request using the Application for Electronic Submittal Waiver to the *Department* at the following address:

NYS DEC Bureau of Water Compliance

MS4 NOTICE OF INTENT WAIVER

625 Broadway, 4th Floor

Albany, New York 12233-3505

- iv. A waiver may only be considered granted once the *MS4 Operator* receives written confirmation from the *Department*.
- v. *MS4 Operators* must document the electronic submission waiver in the *SWMP Plan*, if applicable.

# 2. Annual Reports

- a. Annually, *MS4 Operators* must submit an Annual Report to the *Department* using the form provided by the *Department*. The completion of this permit requirement must be documented in the *SWMP Plan*.
- b. The reporting period for the Annual Report is January 3 of the current year to January 2 of the following year (Reporting Year).
- c. For *MS4 Operators* continuing coverage, the Annual Report must be submitted to the *Department* by April 1 of the year following the end of the Reporting Year.
- d. For newly designated MS4 Operators, if authorization to discharge is granted:
  - Before September 30, the first Annual Report must be submitted by April 1
    of the year following the end of the Reporting Year; or
  - ii. After September 30, the first Annual Report must be submitted by April 1 following their first complete Reporting Year.

## 3. Interim Progress Certifications

a. Twice a year, MS4 Operators must submit to the Department an Interim Progress Certification that verifies the activities included in this SPDES general permit have been completed by the date specified using the form provided by the Department. The completion of this permit requirement must be documented in the SWMP Plan.

- b. MS4 Operators located within the watersheds listed in Table 3 must include additional information to identify the activities that have been performed during the reporting period to demonstrate progress made by the MS4 Operator towards completion of the reduction requirements, prescribed in Part IX.
- c. An Interim Progress Certification for the period of January 3 through June 30 of the same year must be submitted to the *Department* by October 1 of the same year. An Interim Progress Certification for the period of July 1 through January 2 of the following year must be submitted to the *Department* by April 1 of the following year along with the Annual Report. Submission of the Annual Report is not a substitute for submission of the Interim Progress Certification.

## 4. Shared Annual Reporting

*MS4 Operators* working together to implement their *SWMPs* may complete and submit a shared Annual Report to satisfy the reporting requirements specified in Part V.B.2.

- a. The shared Annual Report must outline and explain group activities, but also include the tasks performed by each individual *MS4 Operator*.
- b. On or before the reporting deadline, April 1, each *MS4 Operator* within the group, must sign the certification section of the Annual Report to take responsibility for the information in the Annual Report, which includes specific endorsement or acceptance of both the shared Annual Report information and Annual Report information on behalf of the individual *MS4 Operator*.

#### 5. Certification

All reports specified within this Part must be signed and certified in accordance with Part X.J.

## 6. Annual Report and Interim Progress Certification Content

The Annual Report and Interim Progress Certifications shall summarize the activities performed throughout the Reporting Year, including:

- a. The status of compliance with permit requirements;
- b. Information documented in the *SWMP Plan*, as specified throughout this *SPDES* general permit; and
- c. A certification statement in accordance with 40 CFR 122.22(d).

#### C. SWMP Evaluation

Once every five (5) years, the MS4 Operator must evaluate the SWMP for compliance with the terms and conditions of this SPDES general permit, including the effectiveness or deficiencies of components of the individual SWMP Plan, and

the status of achieving the requirements outlined in this *SPDES* general permit. The *SWMP* evaluation must be documented in the *SWMP Plan*.

# Part VI. Minimum Control Measures (MCMs) for *Traditional Land Use Control MS4 Operators*

In addition to the requirements contained in Part I. through Part V, *traditional land use control MS4 Operators* must comply with the MCMs contained in this Part.

# A. MCM1 - Public Education and Outreach Program

The MS4 Operator must develop and implement an education and outreach program to increase public awareness of pollutant generating activities and behaviors. This MCM is designed to inform the public about the impacts of stormwater on water quality, the general sources of stormwater pollutants, and the steps the general public can take to reduce pollutants in stormwater runoff.

## 1. Development

#### a. Focus Areas

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the focus areas in the *SWMP Plan*. The focus areas to be considered are as follows:

- i. Areas *discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a));
- ii. Sewersheds for impaired waters listed in Appendix C (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.c. for MS4
   Operators continuing coverage and Part IV.D.2.a.ii. for newly designated MS4 Operators);
- iii. *TMDL* watersheds (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
- iv. Areas with construction activities;
- v. Areas with on-site wastewater systems (subject to Part VIII. or Part IX. requirements);
- vi. Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.e.iii.);
- vii. Stormwater hotspots; and
- viii. Areas with illicit discharges.

#### b. Target Audiences and Associated *Pollutant* Generating Activities

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the applicable target audience(s) and associated *pollutant* generating activities that the outreach and education will address for each focus area identified by the *MS4 Operator* in Part VI.A.1.a. in the *SWMP Plan*. The target audiences are as follows:

- i. Residents;
- ii. Commercial: 10 Business owners and staff;
- iii. Institutions: 11 Managers, staff, and students;
- iv. Construction: Developers, contractors, and design professionals;
- v. Industrial: 12 Owners and staff; and
- vi. MS4 Operator's municipal staff.

## c. Education and Outreach Topics

Within three (3) years of the EDC, the *MS4 Operator* must identify and document in the *SWMP Plan* the education and outreach topics and how the education and outreach topics will reduce the potential for *pollutants* to be generated by the target audience(s) (Part VI.A.1.b.) for the focus area(s) (Part VI.A.1.a.).

# d. Illicit Discharge Education

Within six (6) months of the EDC, the *MS4 Operator* must make information related to the prevention of *illicit discharges*, available to *municipal* employees, businesses, and the public and document the completion of this requirement in the *SWMP Plan*. The information related to the prevention of illicit discharges must include the following:

- i. What types of *discharges* are allowable (Part I.A.3.);
- ii. What is an *illicit discharge* and why is it prohibited (Part VI.C.);
- iii. The environmental hazards associated with *illicit discharges* and improper disposal of waste;
- iv. Proper handling and disposal practices for the most common behaviors within the community (e.g., septic care, car washing, household hazardous waste, swimming pool draining, or other activities resulting in *illicit discharges* to the *MS4*); and
- v. How to report illicit discharges they may observe (Part VI.C.1.a.).

### 2. Implementation and Frequency

a. Distribution Method of Educational Messages

Once every five (5) years, the *MS4 Operator* must identify and document in the *SWMP Plan* which of the following method(s) are used for the distribution of educational messages:

- i. Printed materials (e.g., mail inserts, brochures, and newsletters);
- ii. Electronic materials (e.g., websites, email listservs);

<sup>&</sup>lt;sup>10</sup> Business, retail stores, and restaurants.

<sup>&</sup>lt;sup>11</sup> Hospitals, churches, colleges, and schools.

<sup>&</sup>lt;sup>12</sup> Factories, recyclers, auto-salvage, and mines.

- iii. Mass media (e.g., newspapers, public service announcements on radio or cable);
- iv. Workshops or focus groups;
- v. Displays in public areas (e.g., town halls, library, parks); or
- vi. Social Media (e.g., Facebook, Twitter, blogs).

## b. Frequency

Following the completion of Part VI.A.1.a, Part VI.A.1.b, and Part VI.A.1.c, within five (5) years of the EDC, and once every five (5) years, thereafter, the *MS4 Operator* must:

- Deliver an educational message to each target audience(s) (Part VI.A.1.b.) for each focus area(s) (Part VI.A.1.a.) based on the defined education and outreach topic(s) (Part VI.A.1.c.); and
- ii. Document the completion of this requirement in the SWMP Plan.
- c. Updates to the Public Education and Outreach Program

Following the completion of Part VI.A.1.a, Part VI.A.1.b, and Part VI.A.1.c, annually, by April 1, the *MS4 Operator* must:

- i. Review and update the focus areas, target audiences, and/or education and outreach topics; and
- ii. Document the completion of this requirement in the SWMP Plan.

# B. MCM 2 - Public Involvement/Participation

The *MS4 Operator* must provide opportunities to involve the public in the development, review, and implementation of the *SWMP*. This MCM is designed to give the public the opportunity to include their opinions in the implementation of this *SPDES* general permit.

## 1. Public Involvement/Participation

- a. Annually, the MS4 Operator must provide an opportunity for public involvement/participation in the development and implementation of the SWMP. The MS4 Operator must document the public involvement/participation opportunities in the SWMP Plan. The opportunities for public involvement/participation are as follows:
  - i. Citizen advisory group on stormwater management;
  - ii. Public hearings or meetings;
  - iii. Citizen volunteers to educate other individuals about the SWMP:
  - iv. Coordination with other pre-existing public involvement/participation opportunities;

- v. Reporting concerns about activities or behaviors observed; or
- vi. Stewardship activities.
- b. Annually, the *MS4 Operator* must inform the public of the opportunity (Part VI.B.1.a.) for their involvement/participation in the development and implementation of the *SWMP* and how they can become involved. The *MS4 Operator* must document the method for distribution of this information in the *SWMP Plan*. The methods for distribution are as follows:
  - i. Public notice;
  - ii. Printed materials (e.g., mail inserts, brochures and newsletters);
  - iii. Electronic materials (e.g., websites, email listservs);
  - iv. Mass media (e.g., newspapers, public service announcements on radio or cable);
  - v. Workshops or focus groups;
  - vi. Displays in public areas (e.g., town halls, library, parks); or
  - vii. Social Media (e.g., Facebook, Twitter, blogs).
- c. Within six (6) months of the EDC, the *MS4 Operator* must identify a local point of contact to receive and respond to public concerns regarding *stormwater* management and compliance with permit requirements. The name or title of this individual, with contact information, must be published on public outreach and public participation materials and documented in the *SWMP Plan*.

## 2. Public Notice and Input Requirements

a. Public Notice and Input Requirements for SWMP Plan

Annually, the *MS4 Operator* must provide an opportunity for the public to review and comment on the publicly available *SWMP Plan* (Part IV.B.2.b.). The public must have the ability to ask questions and submit comments on the *SWMP Plan*. The completion of this permit requirement must be documented in the *SWMP Plan*. This requirement may be satisfied by Part VI.B.1.

- b. Public Notice and Input Requirements for Draft Annual Report
  - i. Annually, the MS4 Operator must provide an opportunity for the public to review and comment on the draft Annual Report. The completion of this permit requirement must be documented in the SWMP Plan. This requirement may be satisfied by either:
    - a) Presentation of the draft Annual Report at a regular meeting of an existing board (e.g., administrative, planning, zoning) or a separate meeting specifically for *stormwater*, as designated by the *MS4* or if requested by the public. The public must have the ability to ask

- questions about and make comments on the draft annual report during that presentation; or
- b) Posting of the draft Annual Report on a public website. The website must provide information on the timeframes and procedures to submit comments and/or request a meeting. However, if a public meeting is requested by two or more persons, the *MS4 Operator* must hold such a meeting.

# c. Consideration of Public Input

- i. Annually, the *MS4 Operator* must include a summary of comments received on the *SWMP Plan* and draft Annual Report in the *SWMP Plan*.
- Within thirty (30) days of when public input is received, the MS4 Operator must update the SWMP Plan, where appropriate, based on the public input received.

# C. MCM 3 - *Illicit Discharge* Detection and Elimination

The *MS4 Operator* must *develop*, implement, and enforce a program which systematically detects, tracks down, and eliminates *illicit discharges* to the *MS4*. This MCM is designed to manage the *MS4* so it is not conveying *pollutants* associated with flows other than those directly attributable to *stormwater* runoff.

# 1. Illicit Discharge Detection

- a. Public Reporting of Illicit Discharges
  - i. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report *illicit discharges*.
  - ii. Within thirty (30) days of an *illicit discharge*, the *MS4 Operator* must document each report of an *illicit discharge* in the *SWMP Plan* with the following information:
    - a) Date of the report;
    - b) Location of the *illicit discharge*;
    - c) Nature of the illicit discharge;
    - d) Follow up actions taken or needed (including response times); and
    - e) Inspection outcomes and any enforcement taken.

# b. Monitoring Locations

The monitoring locations used to detect *illicit discharges* are identified as follows:

i. MS4 outfalls;<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> MS4 outfalls can be found at a municipal facility.

- ii. Interconnections; 14 and
- iii. Municipal facility intraconnections. 15
- c. Monitoring Locations Inventory
  - i. Within three (3) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of the monitoring locations in the *SWMP Plan*. The following information must be included in the inventory:<sup>16</sup>
    - a) Inventory information for MS4 outfalls
      - i) ID;
      - ii) Prioritization (high or low) (Part VI.C.1.d.);
      - iii) Type of monitoring location (Part VI.C.1.b.);
      - iv) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*; <sup>17</sup>
      - v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
      - vi) Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
      - vii) Land use in drainage area;
      - viii)Type of conveyance (open drainage or closed pipe);
      - ix) Material;
      - x) Shape;
      - xi) Dimensions;
      - xii) Submerged in water; and
      - xiii)Submerged in sediment.
    - b) Inventory information for interconnections
      - i) ID:
      - ii) Prioritization (high or low) (Part VI.C.1.d.);
      - iii) Type of monitoring location (Part VI.C.1.b.);
      - iv) Name of *MS4 Operator* receiving *discharge* or private storm system;
      - v) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*; and
      - vi) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).
    - c) Inventory information for *municipal facility intraconnections* 
      - I) ID
      - ii) Prioritization (high or low) (Part VI.C.1.d.);

<sup>&</sup>lt;sup>14</sup> Interconnections can be found at a municipal facility.

<sup>&</sup>lt;sup>15</sup> Municipal facility intraconnections can be found only at a municipal facility.

<sup>&</sup>lt;sup>16</sup> The information included in the inventory is collected during inspections on the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) unless otherwise specified by the permit conditions.

<sup>&</sup>lt;sup>17</sup> This information is collected as part of the *municipal facility* inventory.

- iii) Type of monitoring location (Part VI.C.1.b.);
- iv) Name of MS4 Operator's municipal facility; and
- v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).
- ii. Annually, the *MS4 Operator* must update the inventory if monitoring locations are created or discovered.

## d. Monitoring Locations Prioritization

- i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize monitoring locations which are included in the monitoring locations inventory (Part VI.C.1.c.) as follows:
  - a) High priority monitoring locations include monitoring locations:
    - i) At a high priority municipal facility, as defined in Part VI.F.2.c;
    - ii) *Discharging* to impaired waters (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.e.ii.b));
    - iii) Discharging within a TMDL watershed (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
    - iv) *Discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a)); and/or
    - v) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
  - b) All other monitoring locations are considered low priority.
- ii. Within thirty (30) days of when a monitoring location is constructed or the *MS4 Operator* discovers it, the *MS4 Operator* must prioritize those monitoring locations; and
- iii. Annually, after the initial prioritization (Part VI.C.1.d.i.), the *MS4 Operator* must update the monitoring location prioritization in the inventory (Part VI.C.1.c.) based on information gathered as part of the monitoring location inspection and sampling program (Part VI.C.1.e.). The completion of this permit requirement must be documented in the *SWMP Plan*.
- e. Monitoring Locations Inspection and Sampling Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement a monitoring locations inspection and sampling program. The monitoring locations inspection and sampling program must be documented in the *SWMP Plan* specifying:

i. The monitoring locations inspection and sampling procedures including:

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- a) During *dry weather*, <sup>18</sup> one (1) inspection of each monitoring location identified in the inventory (Part VI.C.1.c.) every five (5) years following the most recent inspection;
- b) Documentation of all monitoring location inspections, including any sampling results, using the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) or an equivalent form containing the same information and include the completed monitoring location inspections and sampling results in the SWMP Plan (e.g., the completed Monitoring Locations Inspection and Sampling Field Sheets);
- c) Provisions to sample all monitoring locations which had inspections which resulted in a suspect or obvious illicit discharge characterization. The sampling requirement is based on the number and severity of physical indicators present in the flow to better inform track down procedures (Part VI.C.2.). If the source of the illicit discharge is clear and discernable (e.g., sewage), sampling is not necessary;
- d) Sampling may be done with field test kits or field instrumentation that are sufficiently sensitive to detect the parameter below the sampling action level used <sup>19</sup> and are not subject to 40 CFR Part 136 requirements for approved methods and certified laboratories;
- e) Provisions to initiate, or cause to initiate, <sup>20</sup> track down procedures (Part VI.C.2.a.), in accordance with the timeframes specified in Part VI.C.2.a.iii, for monitoring locations with an overall characterization<sup>21</sup> as *suspect illicit discharge* or *obvious illicit discharge* or that exceed any sampling action level used;
- f) Provisions to re-inspect the monitoring location within thirty (30) days of initial inspection if there is a *physical indicator not related to flow*, potentially indicative of *intermittent* or *transitory discharges*, utilizing techniques described in Chapter 12.6 of the Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) or equivalent.
  - i) If those same physical indicators persist, the *MS4 Operator* must initiate *illicit discharge* track down procedures (Part VI.C.2.a.).

<sup>&</sup>lt;sup>18</sup> MS4 Operators can reference the Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) for other factors to consider when determining when to conduct monitoring location inspection and sampling.

<sup>&</sup>lt;sup>19</sup> Refer to Chapter 12 of the CWP 2004 for parameters, sampling action levels, and procedures.

<sup>&</sup>lt;sup>20</sup> If track down is conducted by individuals or entities other than those conducting the monitoring locations inspections.

<sup>&</sup>lt;sup>21</sup> Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

- ii. The training provisions for the *MS4 Operator*'s monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.).
  - a) If new staff are added, training on the MS4 Operator's monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling procedures;
  - b) For existing staff, training on the *MS4 Operator*'s monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling and once every five (5) years, thereafter; and
  - c) If the monitoring locations inspection and sampling procedures (Part VI.C.1.e.i.) are updated (Part VI.C.1.e.iv.), training on the updates must be given to all staff prior to conducting monitoring locations inspections and sampling.
- The names, titles, and contact information for the individuals who have received monitoring locations inspection and sampling procedures training and update annually; and
- iv. Annually, by April 1, the MS4 Operator must:
  - a) Review and update the monitoring location inspection and sampling procedures (Part VI.C.1.e.i.) based on monitoring location inspection results (e.g., trends, patterns, areas with *illicit discharges*, and common problems); and
  - b) Document the completion of this requirement in the SWMP Plan.

# 2. Illicit Discharge Track Down Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* track down program to identify the source of *illicit discharges* and the responsible party. The *illicit discharge* track down program must be documented in the *SWMP Plan* specifying:

- a. The illicit discharge track down procedures including:
  - i. Procedures as described in Chapter 13 of CWP 2004 or equivalent;
  - ii. Steps taken for *illicit discharge* track down procedures;
  - iii. The following timeframes to initiate *illicit discharge* track down:
    - a) Within twenty-four (24) hours of discovery, the *MS4 Operator* must initiate track down procedures for flowing *MS4* monitoring locations with *obvious illicit discharges*;<sup>22</sup>

<sup>&</sup>lt;sup>22</sup> Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

- b) Within two (2) hours of discovery, the *MS4 Operator* must initiate track down procedures for *obvious illicit discharges* of sanitary wastewater that would affect bathing areas during bathing season, shell fishing areas or public water intakes and report orally or electronically to the Regional Water Engineer and local health department; and
- c) Within five (5) days of discovery, the *MS4 Operator* must initiate track down procedures for *suspect illicit discharges*.
- b. The training provisions for the *MS4 Operator's illicit discharge* track down procedures (Part VI.C.2.a.).
  - If new staff are added, training on the MS4 Operator's illicit discharge track down procedures (Part VI.C.2.a.) must be given prior to conducting illicit discharge track downs;
  - ii. For existing staff, training on the *MS4 Operator*'s *illicit discharge* track down procedures (Part VI.C.2.a.) must be given prior to *conducting illicit discharge* track downs and once every five (5) years, thereafter; and
  - iii. If the *illicit discharge* track down procedures (Part VI.C.2.a.) are updated (Part VI.C.2.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* track downs.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* track down procedures training and update annually; and
- d. Annually, by April 1, the MS4 Operator must:
  - i. Review and update the *illicit discharge* track down procedures (Part VI.C.2.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

#### 3. Illicit Discharge Elimination Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* elimination program. The *illicit discharge* elimination program must be documented in the *SWMP Plan* specifying:

- a. The *illicit discharge* elimination procedures including:
  - i. Provisions for escalating enforcement and tracking, both consistent with the ERP required in Part IV.F. of this *SPDES* general permit;
  - ii. Provisions to confirm the corrective actions have been taken;
  - iii. Steps taken for illicit discharge elimination procedures; and
  - iv. The following timeframes for *illicit discharge* elimination:
    - a) Within twenty-four (24) hours of identification of an *illicit discharge* that has a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*;

- b) Within five (5) days of identification of an *illicit discharge* that does not have a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*; and
- c) Where elimination of an *illicit discharge* within the specified timeframes (Part VI.C.3.a.iv.) is not possible, the *MS4 Operator* must notify the Regional Water Engineer.
- b. The training provisions for the *MS4 Operator's illicit discharge* elimination procedures (Part VI.C.3.a.).
  - If new staff are added, training on the MS4 Operator's illicit discharge elimination procedures (Part VI.C.3.a.) must be given prior to conducting illicit discharge eliminations;
  - ii. For existing staff, training on the MS4 Operator's illicit discharge elimination procedures (Part VI.C.3.a.) must be given prior to conducting illicit discharge eliminations and once every five (5) years, thereafter; and
  - iii. If the *illicit discharge* elimination procedures (Part VI.C.3.a.) are updated (Part VI.C.3.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* eliminations.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* elimination procedures training and update annually; and
- d. Annually, by April 1, the MS4 Operator must:
  - i. Review and update the *illicit discharge* elimination procedures (Part VI.C.3.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

#### D. MCM 4 - Construction Site Stormwater Runoff Control

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure construction sites are effectively controlled. This MCM is designed to prevent *pollutants* from construction related activities, <sup>23</sup> as well as promote the proper planning and installation of post-construction *SMPs*.

## 1. Applicable Construction Activities/Projects/Sites

- a. The construction site *stormwater* runoff control program must address *stormwater* runoff to the *MS4* from sites with *construction activities* that:
  - i. Result in a total land disturbance of greater than or equal to one acre; or

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<sup>&</sup>lt;sup>23</sup> Projects that comply with the terms and conditions of the CGP or an individual *SPDES* permit for *stormwater* for which they obtained coverage and local erosion and sediment control requirements are effectively controlled.

- ii. Disturb less than one acre if part of a larger common plan of development or sale.
- b. For *construction activities* where the *MS4 Operator* is listed as the owner/operator on the Notice of Intent for coverage under the CGP:
  - i. The MS4 Operator must ensure compliance with the CGP; and
  - ii. The additional requirements for construction oversight described in Part VI.D.6 through Part VI.D.9 are not required.

## 2. Public Reporting of Construction Site Complaints

- a. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report complaints related to construction *stormwater* activity.
- b. The *MS4 Operator* must document reports of construction site complaints in the *SWMP Plan* with the following information:
  - i. Date of the report;
  - ii. Location of the construction site;
  - iii. Nature of complaint;
  - iv. Follow up actions taken or needed; and
  - v. Inspection outcomes and any enforcement taken.

## 3. Construction Oversight Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a construction oversight program. The construction oversight program must be documented in the *SWMP Plan* specifying:

- a. The construction oversight procedures including:
  - i. When the construction site *stormwater* control program applies (Part VI.D.1.);
  - ii. What types of *construction activity* require a SWPPP;
  - iii. The procedures for submission of SWPPPs;
  - iv. SWPPP review requirements (Part VI.D.6.)
  - v. Pre-construction oversight requirements (Part VI.D.7.)
  - vi. Construction site inspection requirements (Part VI.D.8.);
  - vii. Construction site close-out requirements (Part VI.D.9.);
  - viii. Enforcement process/expectations for compliance; and
  - ix. Other procedures associated with the control of *stormwater* runoff from applicable *construction activities*.

- b. The training provisions for the *MS4 Operator*'s construction oversight procedures (Part VI.D.3.a.).
  - i. If new staff are added, training on the *MS4 Operator*'s construction oversight procedures (Part VI.D.3.a.) must be given prior to conducting any construction oversight activities;
  - ii. For existing staff, training on the *MS4 Operator*'s construction oversight procedures (Part VI.D.3.a.) must be given prior to conducting any construction oversight activities and once every five (5) years, thereafter; and
  - iii. If the construction oversight procedures (Part VI.D.3.a.) are updated (Part VI.D.3.a.), training on the updates must be given to all staff prior to conducting construction oversight.
- c. The names, titles, and contact information for the individuals who have received construction oversight training and update annually;
- d. Procedures to ensure those involved in the *construction activity* itself (e.g., contractor, subcontractor, *qualified inspector*, SWPPP reviewers) have received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity; and
- e. Annually, by April 1, the MS4 Operator must:
  - Review and update the construction oversight procedures (Part VI.D.3.a.);
     and
  - ii. Document the completion of this requirement in the SWMP Plan.

# 4. Construction Site Inventory & Inspection Tracking

- a. Within six (6) months of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all applicable construction sites (Part VI.D.1.a.) in the *SWMP Plan*. The following information must be included in the inventory:
  - i. Location of the construction site:
  - ii. Owner/operator contact information, if other than the MS4 Operator;
  - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
  - iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
  - v. Prioritization (high or low) (Part VI.D.5.);
  - vi. Construction project SPDES identification number;
  - vii. SWPPP approval date;
  - viii. Inspection history, including dates and ratings (satisfactory, marginal, or unsatisfactory, when available); and

- ix. Current status of the construction site/project (i.e., active, temporarily shut down, complete<sup>24</sup>).
- b. Annually, the *MS4 Operator* must update the inventory if construction projects are approved or completed.

#### 5. Construction Site Prioritization

- a. Within one (1) year of the EDC, the MS4 Operator must prioritize all construction sites which are included in the construction site inventory (Part VI.D.4.) as follows:
  - i. High priority construction sites include construction sites:
    - a) With a direct conveyance (e.g., channel, ditch, storm sewer) to a surface water of the State that is:
      - i) Listed in Appendix C with silt/sediment, phosphorus, or nitrogen as the POC;
      - ii) Classified as AA-S, AA, or A (mapped in accordance with Part IV.D.1.e.ii.a)); or
      - iii) Classified with a trout (T) or trout spawning (TS) designation (mapped in accordance with Part IV.D.1.e.ii.a));
    - b) With greater than five (5) acres of disturbed earth at any one time;
    - c) With earth disturbance within one hundred (100) feet of any lake or pond (mapped in accordance with Part IV.D.1.e.ii.b)); and/or
    - d) Within fifty (50) feet of any rivers or streams (mapped in accordance with Part IV.D.1.e.ii.b));
  - ii. All other construction sites are considered low priority.
- b. Within thirty (30) days of when a construction site becomes active, the *MS4 Operator* must prioritize those construction sites; and
- c. Annually, after the initial prioritization (Part VI.D.5.a.), the *MS4 Operator* must update the construction site prioritization in the inventory (Part VI.D.4.a.) based on information gathered as part of the construction oversight program (Part VI.D.3.). The completion of this permit requirement must be documented in the *SWMP Plan*.
  - If the prioritization of the construction site changes priority based on information gathered as part of the construction oversight program, the MS4 Operator must comply with the requirements that apply to that prioritization.

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<sup>&</sup>lt;sup>24</sup> Construction projects listed on the inventory must be inspected and tracked as described in Part VI.D.8. until a final site inspection has been completed as specified in Part VI.D.9. and the construction site status changes to complete.

#### 6. SWPPP Review

The MS4 Operator must:

- a. Ensure individual(s), responsible for reviewing SWPPPs for acceptance, receive:
  - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be completed within three (3) years of the EDC and every three (3) years thereafter.
  - ii. Document the completion of this requirement in the SWMP Plan.
- b. Ensure SWPPP reviewers receive this training (Part VI.D.6.a.) prior to conducting SWPPP reviews for acceptance.
  - i. Individuals without these trainings cannot review SWPPPs for acceptance.
  - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.
- c. Ensure individuals responsible for reviewing SWPPPs review all SWPPPs for applicable *construction activities* (Part VI.D.1.) and for conformance with the requirements of the CGP, including:
  - Erosion and sediment controls must be reviewed for conformance with the NYS E&SC 2016, or equivalent;
  - ii. Individuals responsible for review of post-construction SMPs must be qualified professionals or under the supervision of a qualified professional; and
  - iii. Post-construction *SMPs* must be reviewed for conformance with the NYS SWMDM 2015 or equivalent, including:
    - a) All post-construction *SMPs* must meet the *sizing criteria* contained in the CGP and NYS SWMDM 2015.
    - b) Deviations from the performance criteria of the NYS SWMDM 2015 must demonstrate that they are equivalent.
    - c) The SWPPP must include an O&M plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction SMP. The SWPPP must identify the entity that will be responsible for the long-term operation and maintenance of each practice.
- d. In the SWMP Plan, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VI.D.6.a.
- e. In the SWMP Plan, document the SWPPP review including the information found in Part III.B. of the CGP;
- f. Prioritize new construction activities (Part VI.D.5.a.); and

g. Notify construction site owner/operators that their SWPPP has been accepted using the *MS4* SWPPP Acceptance Form<sup>25</sup> created by the *Department* and required by the CGP, signed in accordance with Part X.J.

# 7. Pre-Construction Meeting

Prior to commencement of *construction activities*, the *MS4 Operator* must ensure a pre-construction meeting is conducted. The date and content of the pre-construction inspection/meeting must be documented in the *SWMP Plan*. The owner/operator listed on the CGP NOI (if different from the *MS4 Operator*), the *MS4 Operator*, contractor(s) responsible for implementing the SWPPP for the *construction activity*, and the *qualified inspector* (if required for the *construction activity* by Part IV.C. the CGP) must attend the meeting in order to:

- a. Confirm the approved project has received, or will receive<sup>26</sup>, coverage under the CGP or an individual *SPDES* permit;
- b. Verify contractors and subcontractors selected by the owner/operator of the construction activity have identified at least one individual that has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity as required by the CGP and Part VI.D.3.d; and
- c. Review the construction oversight program (Part VI.D.3.) and expectations for compliance.

#### 8. Construction Site Inspections

The MS4 Operator must:

- a. Ensure individuals(s), responsible for construction site inspections, receive:
  - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be complete, within three (3) years of the EDC and every three (3) years thereafter.
  - ii. Document the completion of this requirement in the SWMP Plan.
- b. Ensure all *MS4* Construction Site Inspectors receive this training prior to conducting construction site inspections.
  - i. Individuals without these trainings cannot inspect construction sites.
  - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.

<sup>&</sup>lt;sup>25</sup> The MS4 SWPPP Acceptance Form can be found on the Department's website.

<sup>&</sup>lt;sup>26</sup> Preconstruction meetings may occur prior to the issuance of the MS4 SWPP Acceptance Form, however, the MS4 Operator must confirm coverage under the CGP will be applied for by the construction site owner/operator prior to commencement of construction of *construction activities*.

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- c. Annually inspect all sites with *construction activity* identified in the inventory (Part VI.D.4.) during active construction after the pre-construction meeting (Part VI.D.7.), or sooner if deficiencies are noted that require attention.
  - Follow up to construction site inspections must confirm corrective actions are completed within timeframes established by the CGP and the MS4 Operator's ERP (Part IV.F.1.).
- d. In the SWMP Plan, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VI.D.8.a.
- e. Document all inspections using the Construction Site Inspection Report Form (Appendix D) or an equivalent form containing the same information. The *MS4 Operator* must include the completed Construction Site Inspection Reports in the *SWMP Plan*.

#### 9. Construction Site Close-out

- a. The MS4 Operator must ensure a final construction site inspection is conducted and documentation of the final construction site inspection must be maintained in the SWMP Plan. The final construction site inspection must be documented using the Construction Site Inspection Report Form (Appendix D), or an equivalent form containing the same information, or accept the construction site owner/operator's qualified inspector final inspection certification required by the CGP.
- b. The Notice of Termination (NOT)<sup>27</sup> must be signed by the *MS4 Operator* as required by the CGP for projects determined to be complete. The NOT must be signed in accordance with Part X.J.

#### E. MCM 5 – Post-Construction Stormwater Management

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure proper operation and maintenance of post construction *SMPs* for new or redeveloped sites. This MCM is designed to promote the long-term performance of post-construction *SMPs* in removing *pollutants* from *stormwater* runoff.

#### 1. Applicable Post-Construction SMPs

The post-construction *SMP* program must address *stormwater* runoff to the *MS4* from *publicly owned/operated* and *privately owned/operated* post-construction *SMPs* that meet the following:

a. Post-construction *SMPs* that have been installed as part of any CGP covered construction site or individual *SPDES* permit (since March 10, 2003); and

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<sup>&</sup>lt;sup>27</sup> The NOT can be found on the Department's website.

b. All new post-construction *SMPs* constructed as part of the construction site *stormwater* runoff control program (Part VI.D.).

# 2. Post-Construction SMP Inventory & Inspection Tracking<sup>28</sup>

- a. The MS4 Operators continuing coverage must:
  - i. Maintain the inventory from previous iterations of this *SPDES* general permit for post-construction *SMPs* installed after March 10, 2003; and
  - ii. *Develop* the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
    - a) As they are approved or discovered; or
    - b) After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VI.D.9.b.).
- b. The newly designated *MS4 Operators* must *develop* and maintain the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
  - i. As they are approved or discovered; or
  - ii. After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VI.D.9.b.).
- c. Annually, the MS4 Operator must update the inventory of post-construction SMPs to include the post-construction SMPs in Part VI.E.2.a. and Part VI.E.2.b.
- d. Within five (5) years of the EDC, the following information must be included in the inventory either by using the *MS4 Operator* maintenance records or by verification of maintenance records provided by the owner of the post-construction *SMP*:
  - Street address or tax parcel;
  - ii. Type;<sup>29</sup>
  - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
  - iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
  - v. Date of installation (if available) or discovery;
  - vi. Ownership;
  - vii. Responsible party for maintenance;

<sup>&</sup>lt;sup>28</sup> Post-construction *SMPs* can be found at a *municipal facility*.

<sup>&</sup>lt;sup>29</sup> Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

- viii. Contact information for party responsible for maintenance;
- ix. Location of documentation depicting O&M requirements and legal agreements for post-construction *SMP*;
- x. Frequency for inspection of post-construction *SMP*, as specified in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017) or as specified in the O&M plan contained in the approved SWPPP (Part VI.D.6.);
- xi. Reason for installation (e.g., new development, redevelopment, retrofit, flood control), if known;
- xii. Date of last inspection;
- xiii. Inspection results; and
- xiv. Any corrective actions identified and completed.
- e. *MS4 Operators* must document the inventory of post-construction *SMPs* in the *SWMP Plan*.

#### 3. SWPPP Review

For post-construction *SMP* SWPPP review requirements, see Part VI.D.6.

# 4. Post-Construction SMP Inspection & Maintenance Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a post-construction *SMP* inspection and maintenance program. The post-construction *SMP* inspection and maintenance program must be documented in the *SWMP Plan* specifying:

- a. The post-construction *SMP* inspection and maintenance procedures including:
  - Provisions to ensure that each post-construction SMP identified in the post-construction SMP inventory (Part VI.E.2.) is inspected at the frequency specified in the NYS DEC Maintenance Guidance 2017 or as specified in the O&M plan contained in the approved SWPPP (Part VI.D.6.), if available;
    - a) The MS4 Operator can only accept Level 1 inspections (NYS DEC Maintenance Guidance 2017) by private owners inspecting postconstruction SMPs.
  - ii. Documentation of post-construction *SMP* inspections using the Post-Construction SMP Inspection Checklist<sup>30</sup> or an equivalent form containing the same information. The *MS4 Operator* must include the completed

<sup>&</sup>lt;sup>30</sup> The *Department* developed checklist forms specific to each post-construction *SMP* designed to assist *MS4 Operators* in conducting inspections and maintenance activities of standard practices. The Post-Construction SMP Inspection Checklist, March 31, 2017, can be found on the Department's website.

- post-construction *SMP* inspections (i.e., the completed Post-Construction SMP Inspection Checklist) in the *SWMP Plan*;
- iii. Provisions to initiate follow-up actions (i.e., maintenance, repair, or higher-level inspection) within thirty (30) days of post-construction SMP inspection; and
- iv. Provisions to initiate enforcement within sixty (60) days of the inspection if follow-up actions are not complete.
- b. The training provisions for the *MS4 Operator*'s post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.).
  - i. If new staff are added, training on the MS4 Operator's post-construction SMP inspection and maintenance procedures (Part VI.E.4.a.) and procedures outlined in the Department endorsed program must be given prior to conducting any post-construction SMP inspection and maintenance:
  - ii. For existing staff, training on the *MS4 Operator*'s post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.) and procedures outlined in the *Department* endorsed program must be given prior to conducting any post-construction *SMP* inspection and maintenance and once every five (5) years, thereafter; and
  - iii. If the post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.) are updated (Part VI.E.4.d.), training on the updates must be given to all staff prior to conducting post-construction *SMP* inspection and maintenance.
- c. The names, titles, and contact information for the individuals who have received post-construction *SMP* inspection and maintenance procedures training and update annually; and
- d. Annually, by April 1, the MS4 Operator must:
  - i. Review and update the post-construction *SMP* inspection and maintenance procedures (Part VI.E.4.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

# F. MCM 6 - Pollution Prevention and Good Housekeeping

The MS4 Operator must develop and implement a pollution prevention and good housekeeping program for municipal facilities and municipal operations to minimize pollutant discharges. This MCM is designed to ensure the MS4 Operator's own activities do not contribute pollutants to surface waters of the State.

# 1. Best Management Practices (BMPs) for Municipal Facilities & Operations

Within three (3) years of the EDC, the MS4 Operator must incorporate best management practices (BMPs) into the municipal facility program and municipal operations program to minimize the discharge of pollutants associated with municipal facilities and municipal operations, respectively. The BMPs to be considered are as follows and must be documented in the SWMP Plan:

## a. Minimize Exposure

- i. Exposure of materials to rain, snow, snowmelt, and runoff must be minimized, unless not technologically possible or not economically practicable and achievable in light of best industry practices, including areas used for loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations, with the following BMPs:
  - a) Locate materials and activities inside or protect them with storm resistant coverings;
  - b) Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
  - c) Locate materials, equipment, and activities so leaks and spills are contained in existing containment and diversion systems;
  - d) Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the *discharge* of *pollutants*;
  - e) Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents;
  - f) Use spill/overflow protection equipment;
  - g) Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also captures any overspray;
  - h) Drain fluids, indoors or under cover, from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks; and/or
  - i) Minimize exposure of chemicals by replacing with a less toxic alternative (e.g., use non-hazardous cleaners).
- ii. No Exposure Certification for High Priority Municipal Facilities

- a) Municipal facilities may qualify for No Exposure Certification (Appendix D) when all activities and materials are completely sheltered from exposure to rain, snow, snowmelt and/or runoff.
- b) High priority *municipal* facilities (Part VI.F.2.c.i.a)) with uncovered parking areas for vehicles awaiting maintenance may be considered a low priority *municipal facility* (Part VI.F.2.c.i.c)) if only routine maintenance is performed inside and all other no *exposure* criteria are met.
- c) *Municipal* facilities accepting or repairing disabled vehicles and/or vehicles that have been involved in accidents are not eligible for the *No Exposure* Certification.
- d) *Municipal* facilities must maintain the *No Exposure* Certification and document in the *SWMP Plan*. The *No Exposure* Certification ceases to apply when activities or materials become exposed.

# b. Follow a Preventive Maintenance Program

- i. Implement a preventative maintenance program that includes routine inspection, testing, maintenance, and repair of all fueling areas, vehicles and equipment and systems to prevent leaks, spills and other releases. This includes:
  - Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems;
  - b) Maintaining non-structural *BMPs* (e.g., keep spill response supplies available, personnel appropriately trained, containment measures, covering fuel areas); and
  - c) Ensure vehicle washwater is not *discharged* to the *MS4* or to *surface* waters of the State. Wash equipment/vehicles in a designated and/or covered area where washwater is collected to be recycled or *discharged* to the sanitary sewer (Part I.B.2.d.).
- ii. Routine maintenance must be performed to ensure *BMPs* are operating properly.
- iii. When a *BMP* is not functioning to its designed effectiveness and needs repair or replacement:
  - a) Maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of *stormwater* controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable; and
  - b) Interim measures must be taken to prevent or minimize the *discharge* of *pollutants* until the final repair or replacement is implemented,

including cleaning up any contaminated surfaces so that the material will not be *discharged* during subsequent storm events.

# c. Spill Prevention and Response Procedures

- i. Minimize the potential for leaks, spills and other releases that may be exposed to *stormwater* and *develop* plans for effective response to such spills if or when they occur. At a minimum, the *MS4 Operator* must:
  - a) Store materials in appropriate containers;
  - b) Label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
  - c) Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;
  - d) *Develop* procedures for stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible;
  - e) Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made;
  - f) Develop procedures for notification of the appropriate facility personnel, emergency response agencies, and regulatory agencies when a leak, spill, or other release occurs. If possible, one of these individuals should be a member of the *stormwater* pollution prevention team (Part VI.F.2.d.i.a)). Any spills must be reported in accordance with 6 NYCRR 750-2.7; and
  - g) Following any spill or release, the *MS4 Operator* must evaluate the adequacy of the *BMPs* identified in the *municipal facility* specific SWPPP. If the *BMPs* are inadequate, the SWPPP must be updated to identify new *BMPs* that will prevent reoccurrence and improve the emergency response to such releases.
- ii. Measures for cleaning up spills or leaks must be consistent with applicable petroleum bulk storage, chemical bulk storage, or hazardous waste management regulations at 6 NYCRR Parts 596-599, 613 and 370-373.
- iii. This *SPDES* general permit does not relieve the *MS4 Operator* of any reporting or other requirements related to spills or other releases of petroleum or hazardous substances. Any spill of a hazardous substance must be reported in accordance with 6 NYCRR 597.4. Any spill of petroleum must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

#### d. Erosion and Sediment Controls31

- i. Stabilize exposed areas and control runoff using structural and/or nonstructural controls to minimize onsite erosion and sedimentation.
- ii. The MS4 Operator must consider:
  - a) Structural and/or non-structural controls found in the NYS E&SC 2016;
  - b) Areas that, due to topography, land disturbance (e.g., construction), or other factors, have potential for significant soil erosion;
  - c) Whether structural, vegetative, and/or stabilization *BMPs* are needed to limit erosion;
  - d) Whether velocity dissipation devices (or equivalent measures) are needed at *discharge* locations and along the length of any channel to provide a non-erosive flow velocity from the structure to a water course; and
  - e) Address erosion or areas with poor vegetative cover, especially if the erosion is within fifty (50) feet of a *surface water of the State*.
- e. Manage Vegetated Areas and Open Space on Municipal Property
  - Maintain vegetated areas on MS4 Operator owned/operated property and right of ways:
    - a) Specify proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction;
    - b) Use lawn maintenance and landscaping practices that are protective of water quality. Protective practices include: reduced mowing frequencies; proper disposal of lawn clippings; and use of alternative landscaping materials (e.g., drought resistant planting);
    - Place pet waste disposal containers and signage concerning the proper collection and disposal of pet waste at all parks and open space where pets are permitted; and
    - d) Address waterfowl congregation areas where needed to reduce waterfowl droppings from entering the *MS4*.
- f. Salt<sup>32</sup> Storage Piles or Pile Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or maintenance of paved surfaces, except during loading, unloading, and handling. Implement appropriate measures (e.g., good housekeeping, routine sweeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

<sup>&</sup>lt;sup>31</sup> The use of the term "controls" in Part VI.F.1.d. aligns with the use of the term "controls" in the CGP.

<sup>&</sup>lt;sup>32</sup> For purposes of this *SPDES* general permit, salt means any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

## g. Waste, Garbage, and Floatable Debris

- Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that *discharges* have a control (e.g., secondary containment, treatment); and
- ii. Keep exposed areas free of waste, garbage, and debris or intercept them before they are *discharged*:
  - a) Manage trash containers at parks and open space (scheduled cleanings; sufficient number);
  - b) Pick up trash and debris on *MS4 Operator* owned/operated property and rights of way; and
  - c) Clean out *catch basins* within the appropriate timeframes (Part VI.F.3.c.iii.).

# h. Alternative Implementation Options

When alternative implementation options (Part IV.A.1.) are utilized, require the parties performing *municipal operations* as contracted services, including but not limited to street sweeping, snow removal, and lawn/grounds care, to meet permit requirements as the requirements apply to the activity performed.

# 2. Municipal Facilities<sup>33</sup>

# a. Municipal Facility Program

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal facility* program. The *municipal facility* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal facility* procedures including:
  - a) The *BMPs* (Part VI.F.1.) incorporated into the *municipal facility* program;
  - b) The high priority *municipal facility* requirements (Part VI.F.2.d.) as applied to the specific *municipal facility*; and
  - c) The low priority *municipal facility* requirements (Part VI.F.2.e.) as applied to the specific *municipal facility*.
- ii. The training provisions for the *MS4 Operator's municipal facility* procedures (Part VI.F.2.a.i.).
  - a) If new staff are added, training on the *MS4 Operator's municipal facility* procedures (Part VI.F.2.a.i.) must be given prior to conducting *municipal facility* procedures;
  - b) For existing staff, training on the *MS4 Operator's municipal facility* procedures (Part VI.F.2.a.i.) must be given prior to conducting

<sup>&</sup>lt;sup>33</sup> *Municipal facilities* that have coverage under a separate *SPDES* permit (either individual or MSGP) must comply with the terms and conditions of that permit and the requirements set forth in this Part are not applicable.

- municipal facility procedures and once every five (5) years, thereafter; and
- c) If the *municipal facility* procedures (Part VI.F.2.a.i.) are updated (Part VI.F.2.a.iv.), training on the updates must be given to all staff prior to conducting *municipal facility* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal facility* training and update annually; and
- iv. Annually, by April 1, the MS4 Operator must:
  - Review and update the municipal facility procedures (Part VI.F.2.a.i.);
     and
  - b) Document the completion of this requirement in the SWMP Plan.

#### b. *Municipal Facility* Inventory

- i. Within two (2) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all *municipal* facilities in the *SWMP* Plan. The following information must be included in the inventory:
  - a) Name of municipal facility;
  - b) Street address;
  - c) Type of municipal facility;
  - d) Prioritization (high or low) (Part VI.F.2.c.);
  - e) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
  - Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
  - g) Contact information;
  - h) Responsible department;
  - i) Location of SWPPP (if high priority; when completed);
  - j) Type of activities present on site;
  - k) Size of facility (acres);
  - Date of last assessment;
  - m) BMPs identified; and
  - n) Projected date of next comprehensive site assessment (Part VI.F.2.d.ii.c) or Part VI.F.2.e.ii.c), depending on the *municipal facility* prioritization (Part VI.F.2.c.)).
- ii. Annually, the *MS4 Operator* must update the inventory if new *municipal* facilities are added.

#### c. Municipal Facility Prioritization

- i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize all known *municipal* facilities as follows:
  - a) High priority *municipal facilities* include *municipal* facilities that have one or more of the following on site and exposed to *stormwater*:
    - Storage of chemicals, salt, petroleum, pesticides, fertilizers, antifreeze, lead-acid batteries, tires, waste/debris;
    - ii) Fueling stations; and/or
    - iii) Vehicle or equipment maintenance/repair.
  - b) Low priority *municipal facilities* include any *municipal* facilities that do not meet the criteria for a high priority (Part VI.F.2.c.i.a)) *municipal facility*.
  - c) High priority *municipal facilities* (Part IV.F.2.c.i.a)) which qualify for a *No Exposure* Certification (Part VI.F.1.a.ii.) are low priority *municipal* facilities.
- ii. Within thirty (30) days of when a *municipal facility* is added to the inventory, the *MS4 Operator* must prioritize those *municipal* facilities; and
- iii. Annually, after the initial prioritization (Part VI.F.2.c.i.), the *MS4 Operator* must update the *municipal facility* prioritization in the inventory (Part VI.F.2.b.i.) based on information gathered as part of the *municipal facility* program (Part VI.F.2.a.), including cases where a *No Exposure* Certification (Part VI.F.1.a.ii.) ceases to apply. The completion of this permit requirement must be documented in the *SWMP Plan*.

## d. High Priority Municipal Facility Requirements

#### i. Municipal Facility Specific SWPPP

Within five (5) years of the EDC, MS4 Operators must develop and implement a municipal facility specific SWPPP for each high priority municipal facility (Part VI.F.2.c.i.a)) and retain a copy of the municipal facility specific SWPPP on site of the respective municipal facility. The SWPPP must contain:

a) Stormwater Pollution Prevention Team

The *municipal facility* specific SWPPP must identify the individuals (by name and/or title) and their role/responsibilities in *developing*, implementing, maintaining, and revising the *municipal facility* specific SWPPP. The activities and responsibilities of the team must address all aspects of the *municipal facility* specific SWPPP.

b) General Site Description

A written description of the nature of the activities occurring at the *municipal facility* with a potential to *discharge pollutants*, type of

*pollutants* expected, and location of key features as detailed in the site map (Part VI.F.2.d.i.e)).

c) Summary of potential *pollutant* sources

The *municipal facility* specific SWPPP must identify each area at the *municipal facility* where materials or activities are exposed to *stormwater* or from which authorized non-*stormwater discharges* (Part I.A.3.) originate, including any potential *pollutant* sources for which the *municipal facility* has reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA), Section 313.

- i) Materials or activities include: machinery; raw materials; intermediate products; byproducts; final products or waste products; and, material handling activities which includes storage, loading and unloading, transportation or conveyance of any raw material, intermediate product, final product or waste product.
- ii) For each separate area identified, the description must include:
  - (a) Activities A list of the activities occurring in the area (e.g., material storage, equipment fueling and cleaning);
  - (b) <u>Pollutants</u> A list of the associated <u>pollutant(s)</u> for each activity. The <u>pollutant(s)</u> list must include all materials that are exposed to <u>stormwater</u>; and
  - (c) Potential for presence in stormwater For each area of the municipal facility that generates stormwater discharges, a prediction of the direction of flow, and the likelihood of the activity to contaminate the stormwater discharge. Factors to consider include the toxicity of chemicals, quantity of chemicals used, produced or discharged, the likelihood of contact with stormwater, and history of leaks or spills of toxic or hazardous pollutants.

## d) Spills and Releases

For areas that are exposed to precipitation or that otherwise drain to a *stormwater* conveyance to be covered under this *SPDES* general permit, the *municipal facility* specific SWPPP must include a list of spills or releases<sup>34</sup> of petroleum and hazardous substances or other *pollutants*, including unauthorized *non-stormwater discharges*, that may adversely affect water quality that occurred during the last three-year period. The list must be updated when spills or releases occur.

e) Site Map

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<sup>&</sup>lt;sup>34</sup> This may also include releases of petroleum or hazardous substances that are not in excess of reporting quantities but which may still cause or contribute to significant water quality impairment.

The *municipal facility* specific SWPPP must include a site map identifying the following, as applicable:

- Property boundaries and size in acres;
- ii) Location and extent of significant structures (including materials shelters), and impervious surfaces;
- iii) Monitoring locations (mapped in accordance with Part IV.D.2.a.i.) with its approximate *sewershed*. Each monitoring location must be labeled with the monitoring location identification;
- iv) Location of all post-construction *SMPs* (mapped in accordance with Part IV.D.2.a.iv.) and *MS4* infrastructure (mapped in accordance with Part IV.D.2.b.i.);
- v) Locations of *discharges* authorized under other *SPDES* permits;
- vi) Locations where potential spills or releases can contribute to pollutants in stormwater discharges and their accompanying drainage points;
- vii) Locations of haul and access roads;
- viii)Rail cars and tracks;
- ix) Arrows showing direction of stormwater flow;
- x) Location of all receiving waters in the immediate vicinity of the municipal facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them (mapped in accordance with Part IV.D.1.e.ii.);
- xi) Locations where *stormwater* flows have significant potential to cause erosion;
- xii) Location and source of run-on from adjacent property containing significant quantities of *pollutants* and/or volume of concern to the *municipal facility*; and
- xiii) Locations of the following areas where such areas are exposed to precipitation or *stormwater*:
  - (a) Fueling stations;
  - (b) Vehicle and equipment maintenance and/or cleaning areas;
  - (c) Loading/unloading areas;
  - (d) Locations used for the treatment, storage or disposal of wastes;
  - (e) Liquid storage tanks;
  - (f) Processing and storage areas;
  - (g) Locations where significant materials, fuel or chemicals are stored and transferred;
  - (h) Locations where vehicles and/or machinery are stored when not in use
  - (i) Transfer areas for substances in bulk;

- (j) Location and description of non-stormwater discharges (Part I.A.3.);
- (k) Locations where spills<sup>35</sup> or leaks have occurred; and
- (I) Locations of all existing structural BMPs.
- f) Stormwater Best Management Practices (BMPs)

The *municipal facility* specific SWPPP must document the location and type of *BMPs* implemented at the *municipal facility* (Part VI.F.1.). The *municipal facility* specific SWPPP must describe how each *BMP* is being implemented for all the potential *pollutant* sources.

g) Municipal facility assessments
The municipal facility specific SWPPP must include a schedule for completing and recording results of routine and comprehensive site assessments (Part VI.F.2.d.ii.c)).

# ii. Municipal Facility Assessments

- a) Wet Weather Visual Monitoring
  - i) Once every five (5) years, the *MS4 Operator* must conduct wet weather visual monitoring of the monitoring locations (Part VI.C.1.b.) and other sites of *stormwater* leaving the site that are *discharging stormwater* from fueling areas, storage areas, vehicle and equipment maintenance/fueling areas, material handling areas and similar potential *pollutant* generating areas (Part VI.F.2.d.i.e)xiii)).
    - (a) All samples must be collected from *discharges* resulting from a *qualifying storm event*. The storm event must be documented using the Storm Event Data Form (Appendix D) and kept with the *municipal facility* specific SWPPP. The sample must be taken during the first thirty (30) minutes (or as soon as practical, but not to exceed one hour) of the *discharge* at the monitoring location.
    - (b) No analytical tests are required to be performed on the samples for the purpose of meeting the visual monitoring requirements.
    - (c) The visual examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of *stormwater* pollution.
    - (d) The visual examination of the sample must be conducted in a well-lit area.

<sup>&</sup>lt;sup>35</sup> A spill includes: any spill of a hazardous substance that must be reported in accordance with 6 NYCRR 597.4 and any spill of petroleum that must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

- (e) Where practicable, the same individual should carry out the collection and examination of *discharges* for the entire permit term for consistency.
- (f) The MS4 Operator must document the visual examination using the Visual Monitoring Form (Appendix D) and keep it with the municipal facility specific SWPPP to record:
  - (i) Monitoring location ID;
  - (ii) Examination date and time;
  - (iii) Personnel conducting the examination;
  - (iv) Nature of the discharge (runoff or snowmelt);
  - (v) Visual quality of the stormwater discharge including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution; and
  - (vi) Probable sources of any observed *stormwater* contamination.
  - (vii) Corrective and follow up actions If the visual examination indicates the presence of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators of stormwater pollution, the MS4 Operator must, at minimum, complete and document the following actions:
    - (1) Evaluate the facility for potential sources;
    - (2) Remedy the problems identified;
    - (3) Revise the municipal facility specific SWPPP; and
    - (4) Perform an additional visual inspection during the first qualifying storm event following implementation of the corrective action. If the first qualifying storm event does not occur until the next visual monitoring period, this follow up action may be used as the next visual inspection.
- b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VI.C.1.e.).
- c) Comprehensive Site Assessments
  - i) Once every five (5) years following the most recent assessment, the MS4 Operator must complete a comprehensive site assessment for each high priority municipal facility as identified in the inventory (Part VI.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing

the same information, and document in the *municipal facility* specific SWPPP and *SWMP Plan* that:

- (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
- (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment:
  - (i) Within twenty-four (24) hours, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be taken to minimize any discharge in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
  - (i) Within seven (7) days, the MS4 Operator must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

# e. Low Priority Municipal Facility Requirements

- i. The MS4 Operator must identify procedures outlining BMPs for the types of activities that occur at the low priority municipal facilities as described in Part VI.F.1. A municipal facility specific SWPPP is not required.
- ii. Municipal Facility Assessments
  - a) Low priority *municipal* facilities are not required to conduct wet weather visual monitoring.
  - b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VI.C.1.e.).
  - c) Comprehensive Site Assessments
    - i) Once every five (5) years following the most recent assessment, the *MS4 Operator* must complete a comprehensive site assessment for each low priority *municipal facility* as identified in the inventory (Part VI.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing the same information, and document in the *SWMP Plan* that:
      - (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
      - (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which

has a reasonable likelihood of adversely affecting human health or the environment;

- (i) Within twenty-four (24) hours, the MS4 Operator must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be to minimize any discharge in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
  - (i) Within seven (7) days, the MS4 Operator must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

# 3. Municipal Operations & Maintenance

a. Municipal Operations Program

Municipal operations are: street and bridge maintenance; winter road maintenance; MS4 maintenance; open space maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; or hydrologic habitat modification.

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal operations* program. The *municipal operations* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal operations* procedures including:
  - a) The *BMPs* (Part VI.F.1.) incorporated into the *municipal operations* program;
  - b) The *municipal operations* corrective actions requirements (Part VI.F.3.b.);
  - c) Catch basin inspection and maintenance requirements (Part VI.F.3.c.);
  - d) Roads, bridges, parking lots, and right of way maintenance requirements (Part VI.F.3.d.); and
  - e) All other *municipal operations* maintenance requirements.
- ii. The training provisions for the *MS4 Operator*'s *municipal operations* procedures (Part VI.F.3.a.i.).
  - a) If new staff are added, training on the MS4 Operator's municipal operations procedures (Part VI.F.3.a.i.) must be given prior to conducting municipal operations procedures;

- b) For existing staff, training on the *MS4 Operator*'s *municipal operations* procedures (Part VI.F.3.a.i.) must be given prior to conducting *municipal operations* procedures and once every five (5) years, thereafter; and
- c) If the *municipal operations* procedures (Part VI.F.3.a.i.) are updated (Part VI.F.3.a.iv.), training on the updates must be given to all staff prior to conducting *municipal operations* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal operations* training and update annually; and
- iv. Annually, by April 1, the MS4 Operator must:
  - a) Review and update the *municipal operations* procedures (Part VI.F.3.a.i.); and
  - c) Document the completion of this requirement in the SWMP Plan.
- b. Municipal Operations Corrective Actions
  - i. For municipal operations, MS4 Operators must either:
    - a) Ensure compliance with the terms and conditions of this *SPDES* general permit; or
    - b) Implement corrective actions according to the following schedule and, after implementation, ensure the operations are in compliance with the terms and conditions of this *SPDES* general permit:
      - Within twenty-four (24) hours of discovery for situations that have a reasonable likelihood of adversely affecting human health or the environment;
      - ii) Initiated within seven (7) days of inspection and completed within thirty (30) days of inspection for situations that do not have a reasonable likelihood of adversely affecting human health or the environment; and
      - iii) For corrective actions that require special funding or construction that will take longer than thirty (30) days to complete, a schedule must be prepared that specifies interim milestones that will ensure compliance in the shortest reasonable time.
- c. Catch Basin Inspection and Maintenance

Within three (3) years of the EDC, the MS4 Operator must:

- i. Identify when *catch basin* inspection is needed with consideration for:
  - a) Areas with *construction activities* (mapped in accordance with Part IV.D.2.a.iii.);
  - b) Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.d.iii.);

- c) Recurring or history of issues; or
- d) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
- ii. Inventory *catch basin* inspection information including:
  - a) Date of inspection;
  - b) Approximate level of trash, sediment, and/or debris captured at time of clean-out (no trash, sediment, and/or debris, <50% of the depth of the *sump*);
  - c) Depth of structure;
  - d) Depth of sump; and
  - e) Date of clean out, if applicable (Part VI.F.3.c.iii.).
- iii. Based on inspection results, clean out *catch basins* within the following timeframes:
  - a) Within six (6) months after the catch basin inspection, catch basins which had trash, sediment, and/or debris exceeding 50% of the depth of the sump as a result of a catch basin inspection must be cleaned out;
  - b) Within one (1) year after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris at less than 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out; and
  - c) MS4 Operators are not required to clean out *catch basins* if the *catch basins* are operating properly and:
    - i. There is no trash, sediment, and/or debris in the *catch basin*; or
    - ii. The *sump* depth of the *catch basin* is less than or equal to two (2) feet.
- iv. Properly manage (handling and disposal) materials removed from *catch* basins during clean out so that:
  - a) Water removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*;
  - b) Material removed from *catch basins* is disposed of in accordance with any applicable environmental laws and regulations; and
  - c) Material removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*.
- v. Determine if there are signs/evidence of *illicit discharges* and procedures for referral/follow-up if *illicit discharges* are encountered.

# d. Roads, Bridges, Parking Lots, & Right of Way Maintenance

#### i. Sweeping

Within six (6) months of the EDC, the *MS4 Operator* must *develop* and implement procedures for sweeping and/or cleaning *municipal* streets, bridges, parking lots, and right of ways owned/operated by the *MS4 Operator*. The procedures and completion of permit requirements must be documented in the *SWMP Plan* specifying:

- a) All roads, bridges, parking lots, and right of ways must be swept and/or cleaned once every five (5) years in the spring (following winter activities such as sanding). This requirement is not applicable to:
  - i) Uncurbed roads with no catch basins;
  - ii) High-speed limited access highways; or
  - iii) Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b) Annually, from April 1 through October 31, roads in business and commercial areas must be swept. This requirement is not applicable to:
  - i) Uncurbed roads with no catch basins;
  - ii) High-speed limited access highways; or
  - iii) Roads defined as interstates, freeways and expressways, or arterials by the USDOT 2013.

#### ii. Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VI.F.1.), the *MS4 Operator* must implement the following provisions:

- a) Pave, mark, and seal in dry conditions;
- b) Stage road operations and maintenance activity (e.g., patching, potholes) to reduce the potential discharge of pollutants to the *MS4* or *surface waters of the State*;
- c) Restrict the use of herbicides/pesticide application to roadside vegetation; and
- d) Contain *pollutants* associated with bridge maintenance activities (e.g., paint chips, dust, cleaning products, other debris).

#### iii. Winter Road Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VI.F.1.), the *MS4 Operator* must implement the following provisions:

a) Routinely calibrate equipment to control salt/sand application rates;
 and

 Ensure that routine snow disposal activities comply with the Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal.<sup>36</sup>

 $<sup>^{36}</sup>$  The Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal can be found on the Department's website.

# Part VII. Minimum Control Measures (MCMs) for *Traditional Non-Land Use Control & Non-Traditional MS4 Operators*

In addition to the requirements contained in Part I. through Part V, traditional non-land use and non-traditional MS4 Operators must comply with the MCMs contained in this Part. These MS4 Operators should consider their public to be:

- Employees (i.e., staff, faculty);
- User population/visitors;
- Students;
- Tenants; and
- Contractors & developers working for MS4 Operator.

# A. MCM1 – Public Education and Outreach Program

The MS4 Operator must develop and implement an education and outreach program to increase public awareness of pollutant generating activities and behaviors. This MCM is designed to inform the public about the impacts of stormwater on water quality, the general sources of stormwater pollutants, and the steps the general public can take to reduce pollutants in stormwater runoff.

# 1. Development

#### a. Focus Areas

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the focus areas in the *SWMP Plan*. The focus areas to be considered are as follows:

- i. Areas *discharging* to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a));
- ii. Sewersheds for impaired waters listed in Appendix C (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.c. for MS4 Operators continuing coverage and Part IV.D.2.a.ii. for newly designated MS4 Operators);
- iii. *TMDL* watersheds (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
- iv. Areas with construction activities;
- v. Areas with on-site wastewater systems (subject to Part VIII. or Part IX. requirements);
- vi. Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.e.iii.);
- vii. Stormwater hotspots; and
- viii. Areas with *illicit discharges*.

# b. Target Audiences and Associated Pollutant Generating Activities

Within three (3) years of the EDC, the *MS4 Operator* must identify and document the applicable target audience(s) and associated *pollutant* generating activities that the outreach and education will address for each focus area identified by the *MS4 Operator* in Part VII.A.1.a. in the *SWMP Plan*. The target audiences are as follows:

- i. Residents;
- ii. Commercial:<sup>37</sup> Business owners and staff:
- iii. Institutions: 38 Managers, staff, and students;
- iv. Construction: Developers, contractors, and design professionals;
- v. Industrial:39 Owners and staff; and
- vi. MS4 Operator's municipal staff.

## c. Education and Outreach Topics

Within three (3) years of the EDC, the *MS4 Operator* must identify and document in the *SWMP Plan* the education and outreach topics and how the education and outreach topics will reduce the potential for *pollutants* to be generated by the target audience(s) (Part VII.A.1.b.) for the focus area(s) (Part VII.A.1.a.).

## e. Illicit Discharge Education

Within six (6) months of the EDC, the *MS4 Operator* must make information related to the prevention of *illicit discharges*, available to *municipal* employees, businesses, and the public and document the completion of this requirement in the *SWMP Plan*. The information related to the prevention of illicit discharges must include the following:

- i. What types of *discharges* are allowable (Part I.A.3.);
- ii. What is an *illicit discharge* and why is it prohibited (Part VII.C.);
- iii. The environmental hazards associated with *illicit discharges* and improper disposal of waste;
- iv. Proper handling and disposal practices for the most common behaviors within the community (e.g., septic care, car washing, household hazardous waste, swimming pool draining, or other activities resulting in *illicit discharges* to the *MS4*); and
- v. How to report *illicit discharges* they may observe (Part VII.C.1.a.).

<sup>&</sup>lt;sup>37</sup> Business, retail stores, and restaurants.

<sup>&</sup>lt;sup>38</sup> Hospitals, churches, colleges, and schools.

<sup>&</sup>lt;sup>39</sup> Factories, recyclers, auto-salvage, and mines.

# 2. Implementation and Frequency

# a. Distribution Method of Educational Messages

Once every five (5) years, the *MS4 Operator* must identify and document in the *SWMP Plan* which of the following method(s) are used for the distribution of educational messages:

- i. Printed materials (e.g., mail inserts, brochures, and newsletters);
- ii. Electronic materials (e.g., websites, email listservs);
- iii. Mass media (e.g., newspapers, public service announcements on radio or cable);
- iv. Workshops or focus groups;
- v. Displays in public areas (e.g., town halls, library, parks); or
- vi. Social Media (e.g., Facebook, Twitter, blogs).

## b. Frequency

Following the completion of Part VII.A.1.a, Part VII.A.1.b, and Part VII.A.1.c, within five (5) years of the EDC, and once every five (5) years, thereafter, the *MS4 Operator* must:

- Deliver an educational message to each target audience(s) (Part VII.A.1.b.) for each focus area(s) (Part VII.A.1.a.) based on the defined education and outreach topic(s) (Part VII.A.1.c.); and
- ii. Document the completion of this requirement in the SWMP Plan.

#### c. Updates to the Public Education and Outreach Program

Following the completion of Part VII.A.1.a, Part VII.A.1.b, and Part VII.A.1.c, annually, by April 1, the *MS4 Operator* must:

- i. Review and update the focus areas, target audiences, and/or education and outreach topics; and
- ii. Document the completion of this requirement in the SWMP Plan.

# B. MCM 2 - Public Involvement/Participation

The *MS4 Operator* must provide opportunities to involve the public in the development, review, and implementation of the *SWMP*. This MCM is designed to give the public the opportunity to include their opinions in the implementation of this *SPDES* general permit.

#### 1. Public Involvement/Participation

a. Annually, the MS4 Operator must provide an opportunity for public involvement/participation in the development and implementation of the SWMP. The MS4 Operator must document the public involvement/participation opportunities in the SWMP Plan. The opportunities for public involvement/participation are as follows:

- i. Citizen advisory group on *stormwater* management;
- ii. Public hearings or meetings;
- iii. Citizen volunteers to educate other individuals about the SWMP;
- iv. Coordination with other pre-existing public involvement/participation opportunities;
- v. Reporting concerns about activities or behaviors observed; or
- vi. Stewardship activities.
- b. Annually, the *MS4 Operator* must inform the public of the opportunity (Part VII.B.1.a.) for their involvement/participation in the development and implementation of the *SWMP* and how they can become involved. The *MS4 Operator* must document the method for distribution of this information in the *SWMP Plan*. The methods for distribution are as follows:
  - i. Public notice:
  - ii. Printed materials (e.g., mail inserts, brochures and newsletters);
  - iii. Electronic materials (e.g., websites, email listservs);
  - iv. Mass media (e.g., newspapers, public service announcements on radio or cable);
  - v. Workshops or focus groups;
  - vi. Displays in public areas (e.g., town halls, library, parks); or
  - vii. Social Media (e.g., Facebook, Twitter, blogs).
- c. Within six (6) months of the EDC, the *MS4 Operator* must identify a local point of contact to receive and respond to public concerns regarding *stormwater* management and compliance with permit requirements. The name or title of this individual, with contact information, must be published on public outreach and public participation materials and documented in the *SWMP Plan*.

## 2. Public Notice and Input Requirements

a. Public Notice and Input Requirements for SWMP Plan

Annually, the *MS4 Operator* must provide an opportunity for the public to review and comment on the publicly available *SWMP Plan* (Part IV.B.2.b.). The public must have the ability to ask questions and submit comments on the *SWMP Plan*. The completion of this permit requirement must be documented in the *SWMP Plan*. This requirement may be satisfied by Part VII.B.1.

## b. Public Notice and Input Requirements for Draft Annual Report

- i. Annually, the MS4 Operator must provide an opportunity for the public to review and comment on the draft Annual Report. The completion of this permit requirement must be documented in the SWMP Plan. This requirement may be satisfied by either:
  - a) Presentation of the draft Annual Report at a regular meeting of an existing board (e.g., administrative, planning, zoning) or a separate meeting specifically for *stormwater*, as designated by the *MS4* or if requested by the public. The public must have the ability to ask questions about and make comments on the draft annual report during that presentation; or
  - b) Posting of the draft Annual Report on a public website. The website must provide information on the timeframes and procedures to submit comments and/or request a meeting. However, if a public meeting is requested by two or more persons, the *MS4 Operator* must hold such a meeting.

# c. Consideration of Public Input

- i. Annually, the *MS4 Operator* must include a summary of comments received on the *SWMP Plan* and draft Annual Report in the *SWMP Plan*.
- ii. Within thirty (30) days of when public input is received, the *MS4 Operator* must update the *SWMP Plan*, where appropriate, based on the public input received.

# C. MCM 3 - Illicit Discharge Detection and Elimination

The *MS4 Operator* must *develop*, implement, and enforce a program which systematically detects, tracks down, and eliminates *illicit discharges* to the *MS4*. This MCM is designed to manage the *MS4* so it is not conveying *pollutants* associated with flows other than those directly attributable to *stormwater* runoff.

# 1. Illicit Discharge Detection

# a. Public Reporting of *Illicit Discharges*

- i. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report *illicit discharges*.
- ii. Within thirty (30) days of an *illicit discharge*, the *MS4 Operator* must document each report of an *illicit discharge* in the *SWMP Plan* with the following information:
  - a) Date of the report;
  - b) Location of the illicit discharge;
  - c) Nature of the *illicit discharge*;

- d) Follow up actions taken or needed (including response times); and
- e) Inspection outcomes and any enforcement taken.

## b. Monitoring Locations

The monitoring locations used to detect *illicit discharges* are identified as follows:

- i. MS4 outfalls;40
- ii. Interconnections;41 and
- iii. Municipal facility intraconnections.<sup>42</sup>

# c. Monitoring Locations Inventory

- i. Within three (3) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of the monitoring locations in the *SWMP Plan*. The following information must be included in the inventory:<sup>43</sup>
  - a) Inventory information for MS4 outfalls
    - i) ID;
    - ii) Prioritization (high or low) (Part VII.C.1.d.);
    - iii) Type of monitoring location (Part VII.C.1.b.);
    - iv) Name of MS4 Operator's municipal facility, if located at a municipal facility:<sup>44</sup>
    - v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
    - vi) Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
    - vii) Land use in drainage area;
    - viii)Type of conveyance (open drainage or closed pipe);
    - ix) Material;
    - x) Shape;
    - xi) Dimensions;
    - xii) Submerged in water; and
    - xiii)Submerged in sediment.
  - b) Inventory information for *interconnections* 
    - I) IU
    - ii) Prioritization (high or low) (Part VII.C.1.d.);
    - iii) Type of monitoring location (Part VII.C.1.b.);
    - iv) Name of *MS4 Operator* receiving *discharge* or private storm system;

<sup>&</sup>lt;sup>40</sup> MS4 outfalls can be found at a municipal facility.

<sup>&</sup>lt;sup>41</sup> Interconnections can be found a municipal facility.

<sup>&</sup>lt;sup>42</sup> Municipal facility intraconnections can be found only at a municipal facility.

<sup>&</sup>lt;sup>43</sup> The information included in the inventory is collected during inspections on the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) unless otherwise specified by the permit conditions.

<sup>&</sup>lt;sup>44</sup> This information is collected as part of the *municipal facility* inventory.

- v) Name of *MS4 Operator's municipal facility*, if located at a *municipal facility*; and
- vi) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).
- c) Inventory information for municipal facility intraconnections
  - i) ID;
  - ii) Prioritization (high or low) (Part VII.C.1.d.);
  - iii) Type of monitoring location (Part VII.C.1.b.);
  - iv) Name of MS4 Operator's municipal facility; and
  - v) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a)).
- ii. Annually, the *MS4 Operator* must update the inventory if monitoring locations are created or discovered.

## d. Monitoring Locations Prioritization

- i. Within three (3) years of the EDC, the MS4 Operator must prioritize monitoring locations which are included in the monitoring locations inventory (Part VII.C.1.c.) as follows:
  - a) High priority monitoring locations include monitoring locations:
    - vi) At a high priority *municipal facility*, as defined in Part VII.F.2.c;
    - vii) *Discharging* to impaired waters (subject to Part VIII. requirements; mapped in accordance with Part IV.D.1.e.ii.b));
    - viii) Discharging within a TMDL watershed (subject to Part IX. requirements; mapped in accordance with Part IV.D.1.e.ii.c));
    - ix) Discharging to waters with Class AA-S, A-S, AA, A, B, SA, or SB (mapped in accordance with Part IV.D.1.e.ii.a)); and/or
    - x) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
  - b) All other monitoring locations are considered low priority.
- ii. Within thirty (30) days of when a monitoring location is constructed or the *MS4 Operator* discovers it, the *MS4 Operator* must prioritize those monitoring locations; and
- iii. Annually, after the initial prioritization (Part VII.C.1.d.i.), the *MS4 Operator* must update the monitoring location prioritization in the inventory (Part VII.C.1.c.) based on information gathered as part of the monitoring location inspection and sampling program (Part VII.C.1.e.). The completion of this permit requirement must be documented in the *SWMP Plan*.

## e. Monitoring Locations Inspection and Sampling Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement a monitoring locations inspection and sampling program. The monitoring locations inspection and sampling program must be documented in the *SWMP Plan* specifying:

- i. The monitoring locations inspection and sampling procedures including:
  - a) During *dry weather*,<sup>45</sup> one (1) inspection of each monitoring location identified in the inventory (Part VII.C.1.c.) every five (5) years following the most recent inspection;
  - b) Documentation of all monitoring location inspections, including any sampling results, using the Monitoring Locations Inspection and Sampling Field Sheet (Appendix D) or an equivalent form containing the same information and include the completed monitoring location inspections and sampling results in the SWMP Plan (e.g., the completed Monitoring Locations Inspection and Sampling Field Sheets);
  - c) Provisions to sample all monitoring locations which had inspections which resulted in a *suspect* or *obvious illicit discharge* characterization. The sampling requirement is based on the number and severity of *physical indicators present in the flow* to better inform track down procedures (Part VII.C.2.). If the source of the *illicit discharge* is clear and discernable (e.g., sewage), sampling is not necessary;
  - d) Sampling may be done with field test kits or field instrumentation that are sufficiently sensitive to detect the parameter below the sampling action level used<sup>46</sup> and are not subject to 40 CFR Part 136 requirements for approved methods and certified laboratories;
  - e) Provisions to initiate, or cause to initiate, <sup>47</sup> track down procedures (Part VII.C.2.a.), in accordance with the timeframes specified in Part VII.C.2.a.iii, for monitoring locations with an overall characterization <sup>48</sup> as *suspect illicit discharge* or *obvious illicit discharge* or that exceed any sampling action level used;
  - f) Provisions to re-inspect the monitoring location within thirty (30) days of initial inspection if there is a *physical indicator not related to flow*, potentially indicative of *intermittent* or *transitory discharges*, utilizing techniques described in Chapter 12.6 of the Center for Watershed

<sup>&</sup>lt;sup>45</sup> MS4 Operators can reference the Center for Watershed Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) for other factors to consider when determining when to conduct monitoring location inspection and sampling.

<sup>&</sup>lt;sup>46</sup> Refer to Chapter 12 of the CWP 2004 for parameters, sampling action levels, and procedures.

<sup>&</sup>lt;sup>47</sup> If track down is conducted by individuals or entities other than those conducting the monitoring locations inspections.

<sup>&</sup>lt;sup>48</sup> Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

Protection Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004) or equivalent.

- i) If those same physical indicators persist, the *MS4 Operator* must initiate *illicit discharge* track down procedures (Part VII.C.2.a.).
- ii. The training provisions for the *MS4 Operator*'s monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.).
  - a) If new staff are added, training on the *MS4 Operator*'s monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling procedures;
  - b) For existing staff, training on the *MS4 Operator*'s monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.) must be given prior to conducting monitoring locations inspections and sampling and once every five (5) years, thereafter; and
  - c) If the monitoring locations inspection and sampling procedures (Part VII.C.1.e.i.) are updated (Part VII.C.1.e.iv.), training on the updates must be given to all staff prior to conducting monitoring locations inspections and sampling.
- The names, titles, and contact information for the individuals who have received monitoring locations inspection and sampling procedures training and update annually; and
- iv. Annually, by April 1, the MS4 Operator must:
  - a) Review and update the monitoring location inspection and sampling procedures (Part VII.C.1.e.i.) based on monitoring location inspection results (e.g., trends, patterns, areas with *illicit discharges*, and common problems); and
  - b) Document the completion of this requirement in the SWMP Plan.

#### 2. Illicit Discharge Track Down Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* track down program to identify the source of *illicit discharges* and the responsible party. The *illicit discharge* track down program must be documented in the *SWMP Plan* specifying:

- a. The *illicit discharge* track down procedures including:
  - i. Procedures as described in Chapter 13 of CWP 2004 or equivalent;
  - ii. Steps taken for illicit discharge track down procedures;
  - iii. The following timeframes to initiate *illicit discharge* track down:

- a) Within twenty-four (24) hours of discovery, the *MS4 Operator* must initiate track down procedures for flowing *MS4* monitoring locations with *obvious illicit discharges*;<sup>49</sup>
- b) Within two (2) hours of discovery, the *MS4 Operator* must initiate track down procedures for *obvious illicit discharges* of sanitary wastewater that would affect bathing areas during bathing season, shell fishing areas or public water intakes and report orally or electronically to the Regional Water Engineer and local health department; and
- c) Within five (5) days of discovery, the *MS4 Operator* must initiate track down procedures for *suspect illicit discharges*.
- b. The training provisions for the *MS4 Operator's illicit discharge* track down procedures (Part VII.C.2.a.).
  - If new staff are added, training on the MS4 Operator's illicit discharge track down procedures (Part VII.C.2.a.) must be given prior to conducting illicit discharge track downs;
  - ii. For existing staff, training on the MS4 Operator's illicit discharge track down procedures (Part VII.C.2.a.) must be given prior to conducting illicit discharge track downs and once every five (5) years, thereafter; and
  - iii. If the *illicit discharge* track down procedures (Part VII.C.2.a.) are updated (Part VII.C.2.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* track downs.
- c. The names, titles, and contact information for the individuals who have received *illicit discharge* track down procedures training and update annually; and
- d. Annually, by April 1, the *MS4 Operator* must:
  - i. Review and update the *illicit discharge* track down procedures (Part VII.C.2.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

# 3. Illicit Discharge Elimination Program

Within two (2) years of the EDC, the *MS4 Operator* must *develop* and implement an *illicit discharge* elimination program. The *illicit discharge* elimination program must be documented in the *SWMP Plan* specifying:

- a. The illicit discharge elimination procedures including:
  - i. Provisions for escalating enforcement and tracking, both consistent with the ERP required in Part IV.F. of this *SPDES* general permit;
  - ii. Provisions to confirm the corrective actions have been taken;

<sup>&</sup>lt;sup>49</sup> Reference to the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Monitoring Location Characterization based on the Relative Severity Index of physical indicators for flowing monitoring locations only.

- iii. Steps taken for illicit discharge elimination procedures; and
- iv. The following timeframes for *illicit discharge* elimination:
  - a) Within twenty-four (24) hours of identification of an *illicit discharge* that has a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*;
  - b) Within five (5) days of identification of an *illicit discharge* that does not have a reasonable likelihood of adversely affecting human health or the environment, the *MS4 Operator* must eliminate the *illicit discharge*; and
  - c) Where elimination of an *illicit discharge* within the specified timeframes (Part VII.C.3.a.iv.) is not possible, the *MS4 Operator* must notify the Regional Water Engineer.
- b. The training provisions for the *MS4 Operator's illicit discharge* elimination procedures (Part VII.C.3.a.).
  - i. If new staff are added, training on the *MS4 Operator's illicit discharge* elimination procedures (Part VII.C.3.a.) must be given prior to conducting *illicit discharge* eliminations;
  - ii. For existing staff, training on the MS4 Operator's illicit discharge elimination procedures (Part VII.C.3.a.) must be given prior to conducting illicit discharge eliminations and once every five (5) years, thereafter; and
  - iii. If the *illicit discharge* elimination procedures (Part VII.C.3.a.) are updated (Part VII.C.3.d.), training on the updates must be given to all staff prior to conducting *illicit discharge* eliminations.
- The names, titles, and contact information for the individuals who have received *illicit discharge* elimination procedures training and update annually; and
- d. Annually, by April 1, the MS4 Operator must:
  - i. Review and update the *illicit discharge* elimination procedures (Part VII.C.3.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

## D. MCM 4 - Construction Site Stormwater Runoff Control

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure construction sites are effectively controlled. This MCM is designed to prevent *pollutants* from construction related activities, <sup>50</sup> as well as promote the proper planning and installation of post-construction *SMPs*.

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<sup>&</sup>lt;sup>50</sup> Projects that comply with the terms and conditions of the CGP or an individual *SPDES* permit for *stormwater* for which they obtained coverage and local erosion and sediment control requirements are effectively controlled.

# 1. Applicable Construction Activities/Projects/Sites

- a. The construction site *stormwater* runoff control program must address *stormwater* runoff to the *MS4* from sites with *construction activities* permitted, approved, funded, or owned/operated by the *MS4 Operator* that:
  - i. Result in a total land disturbance of greater than or equal to one acre; or,
  - ii. Disturb less than one acre if part of a larger common plan of development or sale.
- b. For *construction activities* where the *MS4 Operator* is listed as the owner/operator on the Notice of Intent for coverage under the CGP:
  - i. The MS4 Operator must ensure compliance with the CGP; and
  - ii. The additional requirements for construction oversight described in Part VII.D.6 through Part VII.D.9 are not required.

## 2. Public Reporting of Construction Site Complaints

- a. Within six (6) months of the EDC, the *MS4 Operator* must establish and document in the *SWMP Plan* an email or phone number (with message recording capability) for the public to report complaints related to construction *stormwater* activity.
- b. The *MS4 Operator* must document reports of construction site complaints in the *SWMP Plan* with the following information:
  - i. Date of the report;
  - ii. Location of the construction site;
  - iii. Nature of complaint;
  - iv. Follow up actions taken or needed; and
  - v. Inspection outcomes and any enforcement taken.

## 3. Construction Oversight Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a construction oversight program. The construction oversight program must be documented in the *SWMP Plan* specifying:

- a. The construction oversight procedures including:
  - i. When the construction site *stormwater* control program applies (Part VII.D.1.);
  - ii. What types of construction activity require a SWPPP;
  - iii. The procedures for submission of SWPPPs;
  - iv. SWPPP review requirements (Part VII.D.6.)
  - v. Pre-construction oversight requirements (Part VII.D.7.)

- vi. Construction site inspection requirements (Part VII.D.8.);
- vii. Construction site close-out requirements (Part VII.D.9.);
- viii. Enforcement process/expectations for compliance; and
- ix. Other procedures associated with the control of *stormwater* runoff from applicable *construction activities*.
- b. The training provisions for the *MS4 Operator*'s construction oversight procedures (Part VII.D.3.a.).
  - If new staff are added, training on the MS4 Operator's construction oversight procedures (Part VII.D.3.a.) must be given prior to conducting any construction oversight activities;
  - ii. For existing staff, training on the *MS4 Operator*'s construction oversight procedures (Part VII.D.3.a.) must be given prior to conducting any construction oversight activities and once every five (5) years, thereafter; and
  - iii. If the construction oversight procedures (Part VII.D.3.a.) are updated (Part VII.D.3.a.), training on the updates must be given to all staff prior to conducting construction oversight.
- c. The names, titles, and contact information for the individuals who have received construction oversight training and update annually;
- d. Procedures to ensure those involved in the *construction activity* itself (e.g., contractor, subcontractor, *qualified inspector*, SWPPP reviewers) have received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity; and
- e. Annually, by April 1, the *MS4 Operator* must:
  - Review and update the construction oversight procedures (Part VII.D.3.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

# 4. Construction Site Inventory & Inspection Tracking

- a. Within six (6) months of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all applicable construction sites (Part VII.D.1.a.) in the *SWMP Plan*. The following information must be included in the inventory:
  - i. Location of the construction site:
  - ii. Owner/operator contact information, if other than the MS4 Operator;
  - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
  - iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));

- v. Prioritization (high or low) (Part VII.D.5.);
- vi. Construction project SPDES identification number;
- vii. SWPPP approval date;
- viii. Inspection history, including dates and ratings (satisfactory, marginal, or unsatisfactory, when available); and
- ix. Current status of the construction site/project (i.e., active, temporarily shut down, complete<sup>51</sup>).
- b. Annually, the *MS4 Operator* must update the inventory if construction projects are approved or completed.

#### 5. Construction Site Prioritization

- a. Within one (1) year of the EDC, the *MS4 Operator* must prioritize all construction sites which are included in the construction site inventory (Part VII.D.4.) as follows:
  - i. High priority construction sites include construction sites:
    - a) With a direct conveyance (e.g., channel, ditch, storm sewer) to a *surface water of the State* that is:
      - Listed in Appendix C with silt/sediment, phosphorus, or nitrogen as the POC;
      - ii) Classified as AA-S, AA, or A (mapped in accordance with Part IV.D.1.e.ii.a)); or
      - iii) Classified with a trout (T) or trout spawning (TS) designation (mapped in accordance with Part IV.D.1.e.ii.a));
    - b) With greater than five (5) acres of disturbed earth at any one time;
    - c) With earth disturbance within one hundred (100) feet of any lake or pond (mapped in accordance with Part IV.D.1.e.ii.b)); and/or
    - d) Within fifty (50) feet of any rivers or streams (mapped in accordance with Part IV.D.1.e.ii.b));
  - ii. All other construction sites are considered low priority.
- b. Within thirty (30) days of when a construction site becomes active, the *MS4 Operator* must prioritize those construction sites; and
- c. Annually, after the initial prioritization (Part VII.D.5.a.), the *MS4 Operator* must update the construction site prioritization in the inventory (Part VII.D.4.a.) based on information gathered as part of the construction oversight program (Part VII.D.3.). The completion of this permit requirement must be documented in the *SWMP Plan*.

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 If the prioritization of the construction site changes priority based on information gathered as part of the construction oversight program, the MS4 Operator must comply with the requirements that apply to that prioritization.

#### 6. SWPPP Review

The MS4 Operator must:

- Ensure individual(s), responsible for reviewing SWPPPs for acceptance, receive:
  - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be completed within three (3) years of the EDC and every three (3) years thereafter.
  - ii. Document the completion of this requirement in the SWMP Plan.
- b. Ensure SWPPP reviewers receive this training (Part VII.D.6.a.) prior to conducting SWPPP reviews for acceptance.
  - i. Individuals without these trainings cannot review SWPPPs for acceptance.
  - ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.
- c. Ensure individuals responsible for reviewing SWPPPs review all SWPPPs for applicable *construction activities* (Part VII.D.1.) and for conformance with the requirements of the CGP, including:
  - Erosion and sediment controls must be reviewed for conformance with the NYS E&SC 2016, or equivalent;
  - ii. Individuals responsible for review of post-construction SMPs must be qualified professionals or under the supervision of a qualified professional; and
  - iii. Post-construction *SMPs* must be reviewed for conformance with the NYS SWMDM 2015 or equivalent, including:
    - a) All post-construction *SMPs* must meet the *sizing criteria* contained in the CGP and NYS SWMDM 2015.
    - b) Deviations from the performance criteria of the NYS SWMDM 2015 must demonstrate that they are equivalent.
    - c) The SWPPP must include an O&M plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction *SMP*. The SWPPP must identify the entity that will be responsible for the long-term operation and maintenance of each practice.

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- d. In the SWMP Plan, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VII.D.6.a.
- e. In the *SWMP Plan*, document the SWPPP review including the information found in Part III.B. of the CGP:
- f. Prioritize new construction activities (Part VII.D.5.a.); and
- g. Notify construction site owner/operators that their SWPPP has been accepted using the *MS4* SWPPP Acceptance Form<sup>52</sup> created by the *Department* and required by the CGP, signed in accordance with Part X.J.

# 7. Pre-Construction Meeting

Prior to commencement of *construction activities*, the *MS4 Operator* must ensure a pre-construction meeting is conducted. The date and content of the pre-construction inspection/meeting must be documented in the *SWMP Plan*. The owner/operator listed on the CGP NOI (if different from the *MS4 Operator*), the *MS4 Operator*, contractor(s) responsible for implementing the SWPPP for the *construction activity*, and the *qualified inspector* (if required for the *construction activity* by Part IV.C. the CGP) must attend the meeting in order to:

- a. Confirm the approved project has received, or will receive<sup>53</sup>, coverage under the CGP or an individual *SPDES* permit;
- b. Verify contractors and subcontractors selected by the owner/operator of the construction activity have identified at least one individual that has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District or other endorsed entity as required by the CGP and Part VII.D.3.d; and
- c. Review the construction oversight program (Part VII.D.3.) and expectations for compliance.

## 8. Construction Site Inspections

The MS4 Operator must:

- a. Ensure individuals(s), responsible for construction site inspections, receive:
  - i. Four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil & Water Conservation District, or other *Department* endorsed entity. This training must be complete, within three (3) years of the EDC and every three (3) years thereafter.
  - ii. Document the completion of this requirement in the SWMP Plan.

<sup>&</sup>lt;sup>52</sup> The *MS4* SWPPP Acceptance Form can be found on the Department's website.

<sup>&</sup>lt;sup>53</sup> Preconstruction meetings may occur prior to the issuance of the MS4 SWPP Acceptance Form, however, the MS4 Operator must confirm coverage under the CGP will be applied for by the construction site owner/operator prior to commencement of construction of *construction activities*.

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b. Ensure all *MS4* Construction Site Inspectors receive this training prior to conducting construction site inspections.

- i. Individuals without these trainings cannot inspect construction sites.
- ii. Individuals who meet the definition of a *qualified professional* or *qualified inspector* are exempt from this requirement.
- c. Annually inspect all sites with *construction activity* identified in the inventory (Part VII.D.4.) during active construction after the pre-construction meeting (Part VII.D.7.), or sooner if deficiencies are noted that require attention.
  - Follow up to construction site inspections must confirm corrective actions are completed within timeframes established by the CGP and the MS4 Operator's ERP (Part IV.F.1.).
- d. In the SWMP Plan, document and update annually the names, titles, and contact information for the individuals who have received the trainings listed in Part VII.D.8.a.
- e. Document all inspections using the Construction Site Inspection Report Form (Appendix D) or an equivalent form containing the same information. The *MS4 Operator* must include the completed Construction Site Inspection Reports in the *SWMP Plan*.

#### 9. Construction Site Close-out

- a. The MS4 Operator must ensure a final construction site inspection is conducted and documentation of the final construction site inspection must be maintained in the SWMP Plan. The final construction site inspection must be documented using the Construction Site Inspection Report Form (Appendix D), or an equivalent form containing the same information, or accept the construction site owner/operator's qualified inspector final inspection certification required by the CGP.
- b. The Notice of Termination (NOT)<sup>54</sup> must be signed by the *MS4 Operator* as required by the CGP for projects determined to be complete. The NOT must be signed in accordance with Part X.J.

#### E. MCM 5 – Post-Construction Stormwater Management

The *MS4 Operator* must *develop*, implement, and enforce a program to ensure proper operation and maintenance of post-construction *SMPs* for new or redeveloped sites. This MCM is designed to promote the long-term performance of post-construction *SMPs* in removing *pollutants* from *stormwater* runoff.

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<sup>&</sup>lt;sup>54</sup> The NOT can be found on the Department's website.

# 1. Applicable Post-Construction SMPs

The post-construction *SMP program* must address *stormwater* runoff to the *MS4* from *publicly owned/operated* post-construction *SMPs* that meet the following:

- a. Post-construction *SMPs* that have been installed as part of any CGP covered construction site or individual *SPDES* permit (since March 10, 2003); and
- b. All new post-construction *SMPs* constructed as part of the construction site *stormwater* runoff control program (Part VII.D.).

# 2. Post-Construction SMP Inventory & Inspection Tracking<sup>55</sup>

- a. The MS4 Operators continuing coverage must:
  - i. Maintain the inventory from previous iterations of this *SPDES* general permit for post-construction *SMPs* installed after March 10, 2003; and
  - ii. *Develop* the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
    - a) As they are approved or discovered; or
    - b) After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VII.D.9.b.).
- b. The newly designated *MS4 Operators* must *develop* and maintain the inventory for post-construction *SMPs* installed after March 10, 2003 including post-construction *SMPs*:
  - i. As they are approved or discovered; or
  - ii. After the owner/operator of the *construction activity* has filed the NOT with the *Department* (Part VII.D.9.b.).
- c. Annually, the MS4 Operator must update the inventory of post-construction SMPs to include the post-construction *SMPs* in Part VII.E.2.a. and Part VII.E.2.b.
- d. Within five (5) years of the EDC, the following information must be included in the inventory either by using the MS4 Operator maintenance records or by verification of maintenance records provided by the owner of the postconstruction SMP:
  - i. Street address or tax parcel;
  - ii. Type;<sup>56</sup>
  - iii. Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));

<sup>&</sup>lt;sup>55</sup> Post-construction *SMPs* can be found at a *municipal facility*.

<sup>&</sup>lt;sup>56</sup> Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

- iv. Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
- v. Date of installation (if available) or discovery;
- vi. Ownership;
- vii. Responsible party for maintenance;
- viii. Contact information for party responsible for maintenance;
- ix. Location of documentation depicting O&M requirements and legal agreements for post-construction *SMP*;
- x. Frequency for inspection of post-construction *SMP*, as specified in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017) or as specified in the O&M plan contained in the approved SWPPP (Part VII.D.6.);
- xi. Reason for installation (e.g., new development, redevelopment, retrofit, flood control), if known;
- xii. Date of last inspection;
- xiii. Inspection results; and
- xiv. Any corrective actions identified and completed.
- e. *MS4 Operators* must document the inventory of post-construction *SMPs* in the *SWMP Plan*.

#### 3. SWPPP Review

For post-construction SMP SWPPP review requirements, see Part VII.D.6.

# 4. Post-Construction SMP Inspection & Maintenance Program

Within one (1) year of the EDC, the *MS4 Operator* must *develop* and implement a post-construction *SMP* inspection and maintenance program. The post-construction *SMP* inspection and maintenance program must be documented in the *SWMP Plan* specifying:

- a. The post-construction *SMP* inspection and maintenance procedures including:
  - Provisions to ensure that each post-construction SMP identified in the post-construction SMP inventory (Part VII.E.2.) is inspected at the frequency specified in the NYS DEC Maintenance Guidance 2017 or as specified in the O&M plan contained in the approved SWPPP (Part VII.D.6.), if available;

- ii. Documentation of post-construction *SMP* inspections using the Post-Construction SMP Inspection Checklist<sup>57</sup> or an equivalent form containing the same information. The *MS4 Operator* must include the completed post-construction *SMP* inspections (i.e., the completed Post-Construction SMP Inspection Checklist) in the *SWMP Plan*;
- iii. Provisions to initiate follow-up actions (i.e., maintenance, repair, or higher-level inspection) within thirty (30) days of post-construction *SMP* inspection; and
- iv. Provisions to initiate enforcement within sixty (60) days of the inspection if follow-up actions are not complete.
- b. The training provisions for the *MS4 Operator*'s post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.).
  - i. If new staff are added, training on the MS4 Operator's post-construction SMP inspection and maintenance procedures (Part VII.E.4.a.) and procedures outlined in the Department endorsed program must be given prior to conducting any post-construction SMP inspection and maintenance;
  - ii. For existing staff, training on the *MS4 Operator*'s post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.) and procedures outlined in the *Department* endorsed program must be given prior to conducting any post-construction *SMP* inspection and maintenance and once every five (5) years, thereafter; and
  - iii. If the post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.) are updated (Part VII.E.4.d.), training on the updates must be given to all staff prior to conducting post-construction *SMP* inspection and maintenance.
- c. The names, titles, and contact information for the individuals who have received post-construction *SMP* inspection and maintenance procedures training and update annually; and
- d. Annually, by April 1, the MS4 Operator must:
  - i. Review and update the post-construction *SMP* inspection and maintenance procedures (Part VII.E.4.a.); and
  - ii. Document the completion of this requirement in the SWMP Plan.

# F. MCM 6 - Pollution Prevention and Good Housekeeping

The MS4 Operator must develop and implement a pollution prevention and good housekeeping program for municipal facilities and municipal operations to minimize

<sup>&</sup>lt;sup>57</sup> The *Department* developed checklist forms specific to each post-construction *SMP* designed to assist *MS4 Operators* in conducting inspections and maintenance activities of standard practices. The Post-Construction SMP Inspection Checklist, March 31, 2017, can be found on the Department's website.

pollutant discharges. This MCM is designed to ensure the MS4 Operator's own activities do not contribute pollutants to surface waters of the State.

# 1. Best Management Practices (BMPs) for Municipal Facilities & Operations

Within three (3) years of the EDC, the MS4 Operator must incorporate best management practices (BMPs) into the municipal facility program and municipal operations program to minimize the discharge of pollutants associated with municipal facilities and municipal operations, respectively. The BMPs to be considered are as follows and must be documented in the SWMP Plan:

## a. Minimize Exposure

- i. Exposure of materials to rain, snow, snowmelt, and runoff must be minimized, unless not technologically possible or not economically practicable and achievable in light of best industry practices, including areas used for loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations, with the following BMPs:
  - a) Locate materials and activities inside or protect them with storm resistant coverings;
  - b) Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
  - c) Locate materials, equipment, and activities so leaks and spills are contained in existing containment and diversion systems;
  - d) Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the *discharge* of *pollutants*;
  - e) Store leaky vehicles and equipment indoors or, if stored outdoors, use drip pans and absorbents;
  - f) Use spill/overflow protection equipment;
  - g) Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also captures any overspray;
  - h) Drain fluids, indoors or under cover, from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks; and/or
  - i) Minimize exposure of chemicals by replacing with a less toxic alternative (e.g., use non-hazardous cleaners).
- ii. No Exposure Certification for High Priority Municipal Facilities
  - a) Municipal facilities may qualify for No Exposure Certification (Appendix D) when all activities and materials are completely sheltered from exposure to rain, snow, snowmelt and/or runoff.

- b) High priority *municipal facilities* (Part VII.F.2.c.i.a)) with uncovered parking areas for vehicles awaiting maintenance may be considered a low priority *municipal facility* (Part VII.F.2.c.i.c)) if only routine maintenance is performed inside and all other no *exposure* criteria are met.
- c) *Municipal facilities* accepting or repairing disabled vehicles and/or vehicles that have been involved in accidents are not eligible for the *No Exposure* Certification.
- d) *Municipal facilities* must maintain the *No Exposure* Certification and document in the *SWMP Plan*. The *No Exposure* Certification ceases to apply when activities or materials become exposed.

## b. Follow a Preventive Maintenance Program

- i. Implement a preventative maintenance program that includes routine inspection, testing, maintenance, and repair of all fueling areas, vehicles and equipment and systems to prevent leaks, spills and other releases. This includes:
  - Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems;
  - b) Maintaining non-structural *BMPs* (e.g., keep spill response supplies available, personnel appropriately trained, containment measures, covering fuel areas); and
  - c) Ensure vehicle washwater is not discharged to the MS4 or to surface waters of the State. Wash equipment/vehicles in a designated and/or covered area where washwater is collected to be recycled or discharged to the sanitary sewer (Part I.B.2.d.).
- ii. Routine maintenance must be performed to ensure *BMPs* are operating properly.
- iii. When a *BMP* is not functioning to its designed effectiveness and needs repair or replacement:
  - a) Maintenance must be performed before the next anticipated storm event, or as necessary to maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable; and
  - b) Interim measures must be taken to prevent or minimize the *discharge* of *pollutants* until the final repair or replacement is implemented, including cleaning up any contaminated surfaces so that the material will not be *discharged* during subsequent storm events.

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## c. Spill Prevention and Response Procedures

- i. Minimize the potential for leaks, spills and other releases that may be exposed to *stormwater* and *develop* plans for effective response to such spills if or when they occur. At a minimum, the *MS4 Operator* must:
  - a) Store materials in appropriate containers;
  - b) Label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
  - c) Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;
  - d) *Develop* procedures for stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible;
  - e) Keep spill kits on-site, located near areas where spills may occur or where a rapid response can be made;
  - f) Develop procedures for notification of the appropriate facility personnel, emergency response agencies, and regulatory agencies when a leak, spill, or other release occurs. If possible, one of these individuals should be a member of the stormwater pollution prevention team (Part VII.F.2.d.i.a)). Any spills must be reported in accordance with 6 NYCRR 750-2.7; and
  - g) Following any spill or release, the *MS4 Operator* must evaluate the adequacy of the *BMPs* identified in the *municipal facility* specific SWPPP. If the *BMPs* are inadequate, the SWPPP must be updated to identify new *BMPs* that will prevent reoccurrence and improve the emergency response to such releases.
- ii. Measures for cleaning up spills or leaks must be consistent with applicable petroleum bulk storage, chemical bulk storage, or hazardous waste management regulations at 6 NYCRR Parts 596-599, 613 and 370-373.
- iii. This SPDES general permit does not relieve the MS4 Operator of any reporting or other requirements related to spills or other releases of petroleum or hazardous substances. Any spill of a hazardous substance must be reported in accordance with 6 NYCRR 597.4. Any spill of petroleum must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

#### d. Erosion and Sediment Controls<sup>58</sup>

i. Stabilize exposed areas and control runoff using structural and/or nonstructural controls to minimize onsite erosion and sedimentation.

<sup>&</sup>lt;sup>58</sup> The use of the term "controls" in Part VII.F.1.d. aligns with the use of the term "controls" in the CGP.

- ii. The MS4 Operator must consider:
  - a) Structural and/or non-structural controls found in the NYS E&SC 2016;
  - b) Areas that, due to topography, land disturbance (e.g., construction), or other factors, have potential for significant soil erosion;
  - c) Whether structural, vegetative, and/or stabilization *BMPs* are needed to limit erosion:
  - d) Whether velocity dissipation devices (or equivalent measures) are needed at *discharge* locations and along the length of any channel to provide a non-erosive flow velocity from the structure to a water course; and
  - e) Address erosion or areas with poor vegetative cover, especially if the erosion is within fifty (50) feet of a *surface water of the State*.
- e. Manage Vegetated Areas and Open Space on Municipal Property
  - i. Maintain vegetated areas on *MS4 Operator* owned/operated property and right of ways:
    - a) Specify proper use, storage, and disposal of pesticides, herbicides, and fertilizers including minimizing the use of these products and using only in accordance manufacturer's instruction;
    - b) Use lawn maintenance and landscaping practices that are protective of water quality. Protective practices include: reduced mowing frequencies; proper disposal of lawn clippings; and use of alternative landscaping materials (e.g., drought resistant planting);
    - Place pet waste disposal containers and signage concerning the proper collection and disposal of pet waste at all parks and open space where pets are permitted; and
    - d) Address waterfowl congregation areas where needed to reduce waterfowl droppings from entering the *MS4*.
- f. Salt<sup>59</sup> Storage Piles or Pile Containing Salt

Enclose or cover storage piles of salt, or piles containing salt, used for deicing or maintenance of paved surfaces, except during loading, unloading, and handling. Implement appropriate measures (e.g., good housekeeping, routine sweeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile.

- g. Waste, Garbage, and Floatable Debris
  - i. Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that *discharges* have a control (e.g., secondary containment, treatment); and

<sup>&</sup>lt;sup>59</sup> For purposes of this *SPDES* general permit, salt means any chloride-containing material used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

- ii. Keep exposed areas free of waste, garbage, and debris or intercept them before they are *discharged*:
  - a) Manage trash containers at parks and open space (scheduled cleanings; sufficient number);
  - b) Pick up trash and debris on *MS4 Operator* owned/operated property and rights of way; and
  - c) Clean out *catch basins* within the appropriate timeframes (Part VII.F.3.c.iii.).

#### h. Alternative Implementation Options

When alternative implementation options (Part IV.A.1.) are utilized, require the parties performing *municipal operations* as contracted services, including but not limited to street sweeping, snow removal, and lawn/grounds care, to meet permit requirements as the requirements apply to the activity performed.

# 2. Municipal Facilities<sup>60</sup>

a. Municipal Facility Program

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal facility* program. The *municipal facility* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal facility* procedures including:
  - a) The *BMPs* (Part VII.F.1.) incorporated into the *municipal facility* program;
  - b) The high priority *municipal facility* requirements (Part VII.F.2.d.) as applied to the specific *municipal facility*; and
  - c) The low priority *municipal facility* requirements (Part VII.F.2.e.) as applied to the specific *municipal facility*.
- ii. The training provisions for the *MS4 Operator's municipal facility* procedures (Part VII.F.2.a.i.).
  - a) If new staff are added, training on the MS4 Operator's municipal facility procedures (Part VII.F.2.a.i.) must be given prior to conducting municipal facility procedures;
  - b) For existing staff, training on the MS4 Operator's municipal facility procedures (Part VII.F.2.a.i.) must be given prior to conducting municipal facility procedures and once every five (5) years, thereafter; and

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<sup>&</sup>lt;sup>60</sup> *Municipal facilities* that have coverage under a separate *SPDES* permit (either individual or MSGP) must comply with the terms and conditions of that permit and the requirements set forth in this Part are not applicable.

- c) If the *municipal facility* procedures (Part VII.F.2.a.i.) are updated (Part VII.F.2.a.iv.), training on the updates must be given to all staff prior to conducting *municipal facility* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal facility* training and update annually; and
- iv. Annually, by April 1, the MS4 Operator must:
  - a) Review and update the *municipal facility* procedures (Part VII.F.2.a.i.); and
  - b) Document the completion of this requirement in the SWMP Plan.

## b. *Municipal Facility* Inventory

- i. Within two (2) years of the EDC, the *MS4 Operator* must *develop* and maintain an inventory of all *municipal* facilities in the *SWMP* Plan. The following information must be included in the inventory:
  - a) Name of municipal facility;
  - b) Street address;
  - c) Type of municipal facility;
  - d) Prioritization (high or low) (Part VII.F.2.c.);
  - e) Receiving waterbody name and class (mapped in accordance with Part IV.D.1.e.ii.a));
  - Receiving waterbody WI/PWL Segment ID (mapped in accordance with Part IV.D.1.e.ii.b));
  - g) Contact information;
  - h) Responsible department;
  - i) Location of SWPPP (if high priority; when completed);
  - j) Type of activities present on site;
  - k) Size of facility (acres);
  - Date of last assessment;
  - m) BMPs identified; and
  - n) Projected date of next comprehensive site assessment (Part VII.F.2.d.ii.c) or Part VII.F.2.e.ii.c), depending on the *municipal facility* prioritization (Part VII.F.2.c.)).
- ii. Annually, the *MS4 Operator* must update the inventory if new *municipal* facilities are added.

## c. Municipal Facility Prioritization

i. Within three (3) years of the EDC, the *MS4 Operator* must prioritize all known *municipal* facilities as follows:

- a) High priority *municipal* facilities include *municipal* facilities that have one or more of the following on site and exposed to *stormwater*:
  - Storage of chemicals, salt, petroleum, pesticides, fertilizers, antifreeze, lead-acid batteries, tires, waste/debris;
  - ii) Fueling stations; and/or
  - iii) Vehicle or equipment maintenance/repair.
- b) Low priority *municipal* facilities include any *municipal* facilities that do not meet the criteria for a high priority (Part VII.F.2.c.i.a)) *municipal* facility.
- c) High priority *municipal* facilities (Part IV.F.2.c.i.a)) which qualify for a *No Exposure* Certification (Part VII.F.1.a.ii.) are low priority *municipal* facilities.
- ii. Within thirty (30) days of when a *municipal facility* is added to the inventory, the *MS4 Operator* must prioritize those *municipal* facilities; and
- iii. Annually, after the initial prioritization (Part VII.F.2.c.i.), the *MS4 Operator* must update the *municipal facility* prioritization in the inventory (Part VII.F.2.b.i.) based on information gathered as part of the *municipal facility* program (Part VII.F.2.a.), including cases where a *No Exposure* Certification (Part VII.F.1.a.ii.) ceases to apply. The completion of this permit requirement must be documented in the *SWMP Plan*.

# d. High Priority Municipal Facility Requirements

## i. Municipal Facility Specific SWPPP

Within five (5) years of the EDC, *MS4 Operators* must *develop* and implement a *municipal facility* specific SWPPP for each high priority *municipal facility* (Part VII.F.2.c.i.a)) and retain a copy of the *municipal facility* specific SWPPP on site of the respective *municipal facility*. The SWPPP must contain:

a) Stormwater Pollution Prevention Team

The *municipal facility* specific SWPPP must identify the individuals (by name and/or title) and their role/responsibilities in *developing*, implementing, maintaining, and revising the *municipal facility* specific SWPPP. The activities and responsibilities of the team must address all aspects of the *municipal facility* specific SWPPP.

b) General Site Description

A written description of the nature of the activities occurring at the *municipal facility* with a potential to *discharge pollutants*, type of *pollutants* expected, and location of key features as detailed in the site map (Part VII.F.2.d.i.e)).

c) Summary of potential *pollutant* sources

The municipal facility specific SWPPP must identify each area at the municipal facility where materials or activities are exposed to stormwater or from which authorized non-stormwater discharges (Part I.A.3.) originate, including any potential pollutant sources for which the municipal facility has reporting requirements under the Emergency Planning and Community Right-To-Know Act (EPCRA), Section 313.

- i) Materials or activities include: machinery; raw materials; intermediate products; byproducts; final products or waste products; and material handling activities which includes storage, loading and unloading, transportation or conveyance of any raw material, intermediate product, final product or waste product.
- ii) For each separate area identified, the description must include:
  - (a) <u>Activities -</u> A list of the activities occurring in the area (e.g., material storage, equipment fueling and cleaning);
  - (b) <u>Pollutants</u> A list of the associated <u>pollutant(s)</u> for each activity. The <u>pollutant(s)</u> list must include all materials that are exposed to <u>stormwater</u>, and
  - (c) Potential for presence in stormwater For each area of the municipal facility that generates stormwater discharges, a prediction of the direction of flow, and the likelihood of the activity to contaminate the stormwater discharge. Factors to consider include the toxicity of chemicals, quantity of chemicals used, produced or discharged, the likelihood of contact with stormwater, and history of leaks or spills of toxic or hazardous pollutants.

# d) Spills and Releases

For areas that are exposed to precipitation or that otherwise drain to a *stormwater* conveyance to be covered under this *SPDES* general permit, the *municipal facility* specific SWPPP must include a list of spills or releases<sup>61</sup> of petroleum and hazardous substances or other *pollutants*, including unauthorized *non-stormwater discharges*, that may adversely affect water quality that occurred during the last three-year period. The list must be updated when spills or releases occur.

# e) Site Map

The *municipal facility* specific SWPPP must include a site map identifying the following, as applicable:

i) Property boundaries and size in acres;

<sup>&</sup>lt;sup>61</sup> This may also include releases of petroleum or hazardous substances that are not in excess of reporting quantities but which may still cause or contribute to significant water quality impairment.

- ii) Location and extent of significant structures (including materials shelters), and impervious surfaces;
- iii) Monitoring locations (mapped in accordance with Part IV.D.2.a.i.) with its approximate *sewershed*. Each monitoring location must be labeled with the monitoring location identification;
- iv) Location of all post-construction *SMPs* (mapped in accordance with Part IV.D.2.a.iv.) and *MS4* infrastructure (mapped in accordance with Part IV.D.2.b.i.);
- v) Locations of *discharges* authorized under other *SPDES* permits;
- vi) Locations where potential spills or releases can contribute to pollutants in stormwater discharges and their accompanying drainage points;
- vii) Locations of haul and access roads;
- viii)Rail cars and tracks;
- ix) Arrows showing direction of stormwater flow;
- x) Location of all receiving waters in the immediate vicinity of the municipal facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDLs established for them (mapped in accordance with Part IV.D.1.e.ii.);
- xi) Locations where *stormwater* flows have significant potential to cause erosion;
- xii) Location and source of run-on from adjacent property containing significant quantities of *pollutants* and/or volume of concern to the *municipal facility*; and
- xiii) Locations of the following areas where such areas are exposed to precipitation or *stormwater*:
  - (a) Fueling stations;
  - (b) Vehicle and equipment maintenance and/or cleaning areas;
  - (c) Loading/unloading areas;
  - (d) Locations used for the treatment, storage or disposal of wastes:
  - (e) Liquid storage tanks;
  - (f) Processing and storage areas;
  - (g) Locations where significant materials, fuel or chemicals are stored and transferred;
  - (h) Locations where vehicles and/or machinery are stored when not in use
  - (i) Transfer areas for substances in bulk;
  - (j) Location and description of non-stormwater discharges (Part I.A.3.);

- (k) Locations where spills<sup>62</sup> or leaks have occurred; and
- (I) Locations of all existing structural *BMP*s.
- f) Stormwater Best Management Practices (BMPs)

The *municipal facility* specific SWPPP must document the location and type of *BMPs* implemented at the *municipal facility* (Part VII.F.1). The *municipal facility* specific SWPPP must describe how each *BMP* is being implemented for all the potential *pollutant* sources.

g) Municipal facility assessments
The municipal facility specific SWPPP must include a schedule for
completing and recording results of routine and comprehensive site
assessments (Part VII.F.2.d.ii.c)).

# ii. Municipal Facility Assessments

- a) Wet Weather Visual Monitoring
  - i) Once every five (5) years, the MS4 Operator must conduct wet weather visual monitoring of the monitoring locations (Part VII.C.1.b.) and other sites of stormwater leaving the site that are discharging stormwater from fueling areas, storage areas, vehicle and equipment maintenance/fueling areas, material handling areas and similar potential pollutant generating areas (Part VII.F.2.d.i.e)xiii)).
    - (a) All samples must be collected from *discharges* resulting from a *qualifying storm event*. The storm event must be documented using the Storm Event Data Form (Appendix D) and kept with the *municipal facility* specific SWPPP. The sample must be taken during the first thirty (30) minutes (or as soon as practical, but not to exceed one hour) of the *discharge* at the monitoring location.
    - (b) No analytical tests are required to be performed on the samples for the purpose of meeting the visual monitoring requirements.
    - (c) The visual examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and any other obvious indicators of *stormwater* pollution.
    - (d) The visual examination of the sample must be conducted in a well-lit area.
    - (e) Where practicable, the same individual should carry out the collection and examination of *discharges* for the entire permit term for consistency.

<sup>&</sup>lt;sup>62</sup> A spill includes: any spill of a hazardous substance that must be reported in accordance with 6 NYCRR 597.4 and any spill of petroleum that must be reported in accordance with 6 NYCRR 613.6 or 17 NYCRR 32.3.

- (f) The MS4 Operator must document the visual examination using the Visual Monitoring Form (Appendix D) and keep it with the municipal facility specific SWPPP to record:
  - (i) Monitoring location ID;
  - (ii) Examination date and time;
  - (iii) Personnel conducting the examination;
  - (iv) Nature of the *discharge* (runoff or snowmelt);
  - (v) Visual quality of the stormwater discharge including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution; and
  - (vi) Probable sources of any observed *stormwater* contamination.
  - (vii) Corrective and follow up actions If the visual examination indicates the presence of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, or other indicators of stormwater pollution, the MS4 Operator must, at minimum, complete and document the following actions:
    - (1) Evaluate the facility for potential sources;
    - (2) Remedy the problems identified;
    - (3) Revise the municipal facility specific SWPPP; and
    - (4) Perform an additional visual inspection during the first qualifying storm event following implementation of the corrective action. If the first qualifying storm event does not occur until the next visual monitoring period, this follow up action may be used as the next visual inspection.
- b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VII.C.1.e.).
- c) Comprehensive Site Assessments
  - i) Once every five (5) years following the most recent assessment, the MS4 Operator must complete a comprehensive site assessment for each high priority municipal facility as identified in the inventory (Part VII.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing the same information, and document in the municipal facility specific SWPPP and SWMP Plan that:

- (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
- (b) Deficiencies were identified and all reasonable steps will be taken to minimize any discharge in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment:
  - (i) Within twenty-four (24) hours, the *MS4 Operator* must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
  - (i) Within seven (7) days, the MS4 Operator must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

## e. Low Priority Municipal Facility Requirements

- i. The MS4 Operator must identify procedures outlining BMPs for the types of activities that occur at the low priority municipal facilities as described in Part VII.F.1. A municipal facility specific SWPPP is not required.
- ii. Municipal Facility Assessments
  - a) Low priority *municipal* facilities are not required to conduct wet weather visual monitoring.
  - b) The monitoring locations inspection and sampling program must be implemented at the *municipal facility* (Part VII.C.1.e.).
  - c) Comprehensive Site Assessments
    - i) Once every five (5) years following the most recent assessment, the MS4 Operator must complete a comprehensive site assessment for each low priority municipal facility as identified in the inventory (Part VII.F.2.b.) using the Municipal Facility Assessment Form (Appendix D) or an equivalent form containing the same information, and document in the SWMP Plan that:
      - (a) The *municipal facility* is in compliance with the terms and conditions of this *SPDES* general permit;
      - (b) Deficiencies were identified and all reasonable steps will be taken to minimize any *discharge* in violation of the permit, which has a reasonable likelihood of adversely affecting human health or the environment:

- (i) Within twenty-four (24) hours, the MS4 Operator must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented; or
- (c) Deficiencies were identified and all reasonable steps will be to minimize any *discharge* in violation of the permit, which does not have a reasonable likelihood of adversely affecting human health or the environment;
  - (i) Within seven (7) days, the MS4 Operator must prepare a schedule that includes corrective actions and specific interim milestones to be implemented until the corrective action is implemented.

# 3. Municipal Operations & Maintenance

a. Municipal Operations Program

Municipal operations are: street and bridge maintenance; winter road maintenance; MS4 maintenance; open space maintenance; solid waste management; new construction and land disturbances; right-of-way maintenance; marine operations; or hydrologic habitat modification.

Within three (3) years of the EDC, the *MS4 Operator* must *develop* and implement a *municipal operations* program. The *municipal operations* program must be documented in the *SWMP Plan* specifying:

- i. The *municipal operations* procedures including:
  - a) The *BMPs* (Part VII.F.1.) incorporated into the *municipal operations* program;
  - b) The *municipal operations* corrective actions requirements (Part VII.F.3.b.);
  - c) Catch basin inspection and maintenance requirements (Part VII.F.3.c.);
  - d) Roads, bridges, parking lots, and right of way maintenance requirements (Part VII.F.3.d.); and
  - e) All other *municipal operations* maintenance requirements.
- ii. The training provisions for the *MS4 Operator*'s *municipal operations* procedures (Part VII.F.3.a.i.).
  - a) If new staff are added, training on the MS4 Operator's municipal operations procedures (Part VII.F.3.a.i.) must be given prior to conducting municipal operations procedures;
  - b) For existing staff, training on the *MS4 Operator*'s *municipal operations* procedures (Part VII.F.3.a.i.) must be given prior to conducting

- *municipal operations* procedures and once every five (5) years, thereafter; and
- c) If the *municipal operations* procedures (Part VII.F.3.a.i.) are updated (Part VII.F.3.a.iv.), training on the updates must be given to all staff prior to conducting *municipal operations* procedures.
- iii. The names, titles, and contact information for the individuals who have received *municipal operations* training and update annually; and
- iv. Annually, by April 1, the MS4 Operator must:
  - a) Review and update the *municipal operations* procedures (Part VII.F.3.a.i.); and
  - b) Document the completion of this requirement in the SWMP Plan.

## b. Municipal Operations Corrective Actions

- i. For municipal operations, MS4 Operators must either:
  - a) Ensure compliance with the terms and conditions of this *SPDES* general permit; or
  - b) Implement corrective actions according to the following schedule and, after implementation, ensure the operations are in compliance with the terms and conditions of this *SPDES* general permit:
    - Within twenty-four (24) hours of discovery for situations that have a reasonable likelihood of adversely affecting human health or the environment;
    - ii) Initiated within seven (7) days of inspection and completed within thirty (30) days of inspection for situations that do not have a reasonable likelihood of adversely affecting human health or the environment; and
    - iii) For corrective actions that require special funding or construction that will take longer than thirty (30) days to complete, a schedule must be prepared that specifies interim milestones that will ensure compliance in the shortest reasonable time.

#### c. Catch Basin Inspection and Maintenance

Within three (3) years of the EDC, the MS4 Operator must:

- i. Identify when *catch basin* inspection is needed with consideration for:
  - a) Areas with *construction activities* (mapped in accordance with Part IV.D.2.a.iii.);
  - b) Residential, commercial, and industrial areas (mapped in accordance with Part IV.D.1.d.iii.);
  - c) Recurring or history of issues; or

- d) Confirmed citizen complaints on three or more separate occasions in the last twelve (12) months.
- ii. Inventory *catch basin* inspection information including:
  - a) Date of inspection;
  - b) Approximate level of trash, sediment, and/or debris captured at time of clean-out (no trash, sediment, and/or debris, <50% of the depth of the *sump*, >50% of the depth of the *sump*);
  - c) Depth of structure;
  - d) Depth of sump; and
  - e) Date of clean out, if applicable (Part VII.F.3.c.iii.).
- iii. Based on inspection results, clean out *catch basins* within the following timeframes:
  - a) Within six (6) months after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris exceeding 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out;
  - b) Within one (1) year after the *catch basin* inspection, *catch basins* which had trash, sediment, and/or debris at less than 50% of the depth of the *sump* as a result of a *catch basin* inspection must be cleaned out; and
  - c) MS4 Operators are not required to clean out *catch basins* if the *catch basins* are operating properly and:
    - i. There is no trash, sediment, and/or debris in the *catch basin*; or
    - ii. The *sump* depth of the *catch basin* is less than or equal to two (2) feet.
- iv. Properly manage (handling and disposal) materials removed from *catch* basins during clean out so that:
  - a) Water removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*;
  - b) Material removed from *catch basins* is disposed of in accordance with any applicable environmental laws and regulations; and
  - c) Material removed during the *catch basin* cleaning process will not reenter the *MS4* or *surface waters of the State*.
- v. Determine if there are signs/evidence of *illicit discharges* and procedures for referral/follow-up if *illicit discharges* are encountered.

# d. Roads, Bridges, Parking Lots, & Right of Way Maintenance

#### i. Sweeping

Within six (6) months of the EDC, the *MS4 Operator* must *develop* and implement procedures for sweeping and/or cleaning *municipal* streets, bridges, parking lots, and right of ways owned/operated by the *MS4 Operator*. The procedures and completion of permit requirements must be documented in the *SWMP Plan* specifying:

- a) All roads, bridges, parking lots, and right of ways must be swept and/or cleaned once every five (5) years in the spring (following winter activities such as sanding). This requirement is not applicable to:
  - i) Uncurbed roads with no catch basins;
  - ii) High-speed limited access highways; or
  - iii) Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b) Annually, from April 1 through October 31, roads in business and commercial areas must be swept. This requirement is not applicable to:
  - i) Uncurbed roads with no catch basins;
  - ii) High-speed limited access highways; or
  - iii) Roads defined as interstates, freeways and expressways, or arterials by the USDOT 2013.

#### ii. Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VII.F.1.), the *MS4 Operator* must implement the following provisions:

- a) Pave, mark, and seal in dry conditions;
- b) Stage road operations and maintenance activity (e.g., patching, potholes) to reduce the potential discharge of pollutants to the *MS4* or *surface waters of the State*;
- c) Restrict the use of herbicides/pesticide application to roadside vegetation; and
- d) Contain *pollutants* associated with bridge maintenance activities (e.g., paint chips, dust, cleaning products, other debris).

#### iii. Winter Road Maintenance

Within five (5) years of the EDC, in addition to the *BMPs* (Part VII.F.1.), the *MS4 Operator* must implement the following provisions:

a) Routinely calibrate equipment to control salt/sand application rates;
 and

 Ensure that routine snow disposal activities comply with the Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal.<sup>63</sup>

 $<sup>^{63}</sup>$  The Division of Water Technical and Operation Guidance Series 5.1.11, Snow Disposal can be found on the Department's website.

# Part VIII. Enhanced Requirements for Impaired Waters

Part VIII. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the MS4 Operator type. Part VIII. requirements apply in the sewersheds which discharge to waters impaired for phosphorus, silt/sediment, pathogens, nitrogen, or floatables (Appendix C). MS4 outfalls are in the automatically designated area. ADA MS4 outfalls are in the additionally designated area subject to Criterion 3 of the Additional Designation Criteria (Appendix B).

MS4 Operator's subject to Part VIII. that implement pollutant specific BMPs after the EDC but prior to MS4 infrastructure and sewershed mapping can use those BMPs to satisfy the permit requirements in this section.

The Part VIII. requirements, applicable to the *POC*, must be incorporated in the *MS4 Operator's SWMP* and *SWMP Plan*.

# A. Pollutant Specific BMPs for Phosphorus

Part VIII.A. must be implemented for all phosphorus impaired waters listed in Appendix C.

## 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:
  - i. MS4 outfall; and
  - ii. ADA MS4 outfall.
- b. Within three (3) years of the EDC, the following information for each MS4 outfall:
  - i. Retail and wholesale plant nurseries (including big box stores);
  - ii. Commercial lawn care facilities; and
  - iii. Golf courses.
- c. Within three (3) years of the EDC, ADA MS4 outfalls.

#### 2. Public Education and Outreach

a. Within six (6) months of the EDC, the MS4 Operator must make available information on how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). MS4 Operators must document the completion of this requirement in the SWMP Plan.

b. Following the completion of Part VIII.A.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to phosphorus to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

## 3. Public Involvement/Participation

No additional requirements.

## 4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.A.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.A.1.b. for each associated *MS4 outfall*.

#### 5. Construction Site Stormwater Runoff Control

For Following the completion of Part VIII.A.1, high priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the SWMP Plan.

## 6. Post-Construction Stormwater Management

No additional requirements.

# 7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.A.1:

- a. Annually, from April 1 through October 31, all streets located in *sewersheds* discharging to phosphorus impaired segments must be swept. *MS4*Operators must document the completion of this requirement in the *SWMP*Plan. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins:

- ii. High-speed limited access highways; or
- iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

# 8. Planned Upgrades to *Municipal Facilities* in *Sewersheds* to Impaired Waters

Incorporate, where feasible, <sup>64</sup> cost-effective runoff reduction techniques <sup>65</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

# B. Pollutant Specific BMPs for Silt/Sediment

Part VIII.B. must be implemented for all silt/sediment impaired waters listed in Appendix C.

## 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:
  - i. MS4 outfall; and
  - ii. ADA MS4 outfall.
- b. Within three (3) years of the EDC, facilities with *SPDES* permit coverage under the MSGP with *stormwater discharges* applicable under Sector C, E, L, or J with facility contact.
- c. Within three (3) years of the EDC, ADA MS4 outfalls.

<sup>&</sup>lt;sup>64</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>&</sup>lt;sup>65</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

#### 2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.B.1, each year of active construction, the MS4 Operator must educate individuals involved in construction activity (e.g., contractor, subcontractor, qualified inspector, SWPPP reviewers) within the sewershed boundary on the use of post-construction SMPs that are intended to collect and separate silt and sediment debris from stormwater before discharging to waters of the State (e.g., sediment forebays) as detailed in the NYS SWMDM 2015. MS4 Operators must document the completion of this requirement in the SWMP Plan.

## 3. Public Involvement/Participation

No additional requirements.

## 4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.B.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.B.1.b. for each associated *MS4 outfall*.

#### 5. Construction Site Stormwater Runoff Control

Following the completion of Part VIII.B.1, high priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the SWMP Plan.

#### 6. Post-Construction *Stormwater* Management

No additional requirements.

## 7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.B.1:

Part VIII.B.

- a. Annually, from April 1 through October 31, all streets located in *sewersheds* discharging to silt/sediment impaired segments must be swept. *MS4* Operators must document the completion of this requirement in the *SWMP* Plan. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins:
  - ii. High-speed limited access highways; or
  - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. For areas within the *sewershed* that are compacted, poorly drained, contain areas of exposed soil, or nutrient deficient, the *MS4 Operator* must:
  - i. Refer to Section 4 of the NYS E&SC 2016 for Soil Stabilization practices, and follow BMP procedures; and
  - ii. *Develop* and implement procedures for watering and maintenance of implemented BMPs appropriate to establish root and vegetative cover, utilizing products which provide critical support to vegetation and soil stabilization.

MS4 Operators must document the completion of this requirement in the SWMP Plan.

c. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

# 8. Planned Upgrades to *Municipal Facilities* in *Sewersheds* to Impaired Waters

Incorporate, where feasible, <sup>66</sup> cost-effective runoff reduction techniques <sup>67</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

<sup>&</sup>lt;sup>66</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>&</sup>lt;sup>67</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

# C. Pollutant Specific BMPs for Pathogens

Part VIII.C. must be implemented for all pathogen impaired waters listed in Appendix C.

## 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:
  - i. MS4 outfall; and
  - ii. ADA MS4 outfall.
- b. Within three (3) years of the EDC, the following information for each *MS4* outfall:
  - i. Areas with a history of sanitary sewer overflows;
  - ii. Waterfowl congregation areas on municipal property or right of way;
  - iii. Areas where pets/domestic animals may frequent (i.e., public trails, dog parks, and zoos); and
  - iv. Waste disposal areas (e.g., active landfills, transfer stations).
- c. Within three (3) years of the EDC, ADA MS4 outfalls.

#### 2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.C.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to pathogens to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

#### 3. Public Involvement/Participation

No additional requirements.

## 4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.C.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.C.1.b. for each associated *MS4 outfall*.

#### 5. Construction Site Stormwater Runoff Control

No additional requirements.

#### 6. Post-Construction *Stormwater* Management

No additional requirements.

## 7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.C.1:

#### a. Infrastructure Maintenance

- i. Annually, from April 1 through October 31, all streets located in sewersheds discharging to pathogen impaired segments must be swept. MS4 Operators must document the completion of this requirement in the SWMP Plan. This requirement is not applicable to:
  - a) Uncurbed roads with no catch basins;
  - b) High-speed limited access highways; or
  - c) Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- ii. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

#### b. Wildlife Control

- i. Within six (6) months of the EDC, the *MS4 Operator* must identify *municipal facilities* with nuisance bird populations that have the potential to contribute pathogens (e.g., Canada Geese) and document those *municipal facilities* in the *SWMP Plan*.
- ii. Within six (6) months of the EDC, signage must be available at these municipal facilities, instructing the public not to feed wildlife. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- iii. Within six (6) months of the EDC, the *MS4 Operator* must remove accumulated trash and debris from *municipal* facilities when necessary to

- eliminate potential food sources for wildlife. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- iv. Within one (1) year of the EDC, *MS4 Operators* must evaluate the effectiveness of deterrents, population controls, and other measures that may reduce bird related pathogen contributions and document the results of the evaluation in the *SWMP Plan*.

#### c. Animal Waste Control

Within one (1) year of the EDC, the *MS4 Operator* must make dog waste receptacles available in areas where pets/domestic animals may frequent (e.g., public trails, dog parks). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

# 8. Planned Upgrades to *Municipal Facilities* in *Sewersheds* to Impaired Waters

Incorporate, where feasible, <sup>68</sup> cost-effective runoff reduction techniques <sup>69</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

# D. Pollutant Specific BMPs for Nitrogen

Part VIII.D. must be implemented for all nitrogen impaired waters listed in Appendix C.

#### 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:
  - i. MS4 outfall; and
  - ii. ADA MS4 outfall.
- b. Within three (3) years of the EDC, the following information for each *MS4* outfall:
  - i. Retail and wholesale plant nurseries (including big box stores);
  - ii. Commercial lawn care facilities; and

<sup>&</sup>lt;sup>68</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>&</sup>lt;sup>69</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

- iii. Golf courses.
- c. Within three (3) years of the EDC, ADA MS4 outfalls.

#### 2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.D.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to nitrogen to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

#### 3. Public Involvement/Participation

No additional requirements.

# 4. Illicit Discharge Detection and Elimination

Following the completion of Part VIII.D.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.D.1.b for each associated *MS4 outfall*.

#### 5. Construction Site Stormwater Runoff Control

Following the completion of Part VIII.D.1, high priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the SWMP Plan.

#### 6. Post-Construction Stormwater Management

No additional requirements.

#### 7. Pollution Prevention and Good Housekeeping

Following the completion of Part VIII.D.1:

- a. Annually, from April 1 through October 31, all streets located in *sewersheds* discharging to nitrogen impaired segments must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins;
  - ii. High-speed limited access highways; or
  - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of MS4 outfall inspection, the MS4 Operator must initiate actions to repair all MS4 outfall protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. MS4 Operators must document the completion of this requirement in the SWMP Plan.

# 8. Planned Upgrades to *Municipal Facilities* in *Sewersheds* to Impaired Waters

Incorporate, where feasible,<sup>70</sup> cost-effective runoff reduction techniques<sup>71</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

# E. Pollutant Specific BMPs for Floatables

Part VIII.E. must be implemented for all floatable impaired waters listed in Appendix C.

#### 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

a. Within three (3) years of the EDC, *MS4* infrastructure mapping requirements (Part IV.D.2.b.i.) and *sewersheds* for each:

<sup>&</sup>lt;sup>70</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>71</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

- i. MS4 outfall; and
- ii. ADA MS4 outfall.
- b. Within three (3) years of the EDC, ADA MS4 outfalls.

#### 2. Public Education and Outreach

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part VIII.E.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to floatables to the applicable target audiences within the *sewersheds* for impaired waters listed in Appendix C focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

## 3. Public Involvement/Participation

No additional requirements.

#### 4. *Illicit Discharge* Detection and Elimination

No additional requirements.

#### 5. Construction Site Stormwater Runoff Control

No additional requirements.

#### 6. Post-Construction Stormwater Management

No additional requirements.

#### 7. Pollution Prevention and Good Housekeeping

Following completion of Part VIII.E.1:

- a. Annually, from April 1 through October 31, all streets located in sewersheds discharging to floatables impaired segments must be swept. MS4 Operators must document the completion of this requirement in the SWMP Plan. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins;
  - ii. High-speed limited access highways; or

Part VIII.E.

- iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of *MS4 outfall* inspection, the *MS4 Operator* must initiate actions to repair all *MS4 outfall* protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

# 8. Planned Upgrades to *Municipal Facilities* in *Sewersheds* to Impaired Waters

Incorporate, where feasible,<sup>72</sup> cost-effective runoff reduction techniques<sup>73</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

<sup>&</sup>lt;sup>72</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>&</sup>lt;sup>73</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

# Part IX. Watershed Improvement Strategy Requirements for TMDL Implementation

Part IX. requirements must be implemented in addition to the applicable requirements of the six (6) MCMs in Part VI. or Part VII, depending on the *MS4 Operator* type. Part IX. requirements apply in the watersheds where the *Department* developed implementation plans for which USEPA has approved a TMDL (Table 3). Finalized TMDL implementation plans referenced in this Part are incorporated into and enforceable under this *SPDES* general permit.

MS4 Operator's subject to Part IX. that implement TMDL specific BMPs after the EDC but prior to MS4 infrastructure and sewershed mapping can use those BMPs to satisfy the permit requirements in this section.

The Part IX. requirements must be incorporated in the MS4 Operator's SWMP and SWMP Plan.

# A. NYC East of Hudson Phosphorus Impaired Watershed MS4s

Table 4. Phosphorus Impaired Watershed(s)				
Areas where requirements apply	New York City East of Hudson (EOH)			
EPA Approved TMDL	Phase II Phosphorus TMDLs for Reservoirs in the NYC Watershed, June 2000	Total Maximum Daily Load (TMDL) for Phosphorus in Lake Carmel, October 2016	Total Maximum Daily Load (TMDL) for Phosphorus in Palmer Lake, <sup>2</sup> March 2015	
Implementation Plan	Croton Watershed Phase II TMDL Implementation Plan (January 2009)			
POC	Phosphorus			
Area where requirements Apply	NYC EOH Watershed			
Achievement of Pollutant Load Reduction	Continued retrofit implementation to achieve the pollutant load reduction specified in that Phase II Implementation Plan			

MS4 Operators located within the watersheds listed in Table 4 must develop and implement the following phosphorus-specific BMPs in addition to the Croton Watershed Phase II TMDL Implementation Plan (January 2009) and the applicable requirements in Part VI. or Part VII, depending on the MS4 Operator type.

#### 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, areas with potential to contribute phosphorus to the TMDL waterbody, which include:
  - i. Retail and wholesale plant nurseries (including big box stores);
  - ii. Commercial lawn care facilities;
  - iii. Golf courses:
  - iv. Commercial or industrial yard waste storage areas (e.g., yard waste composting and disposal areas); and
  - v. *MS4* infrastructure with a history of issues (e.g., clogged infrastructure, infiltration and inflow (I/I)).
- b. Within three (3) years of the EDC, the following information for all post-construction *SMPs* as identified in the post-construction *SMP* inventory (Part VI.E.2. or Part VII.E.2, depending on the *MS4 Operator* type):
  - i. Type;<sup>74</sup> and
  - ii. Ownership.

#### 2. Public Education and Outreach on Stormwater Impacts

- a. Within six (6) months of the EDC, the MS4 Operator must make available information on how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). MS4 Operators must document the completion of this requirement in the SWMP Plan.
- b. Following the completion of Part IX.A.1, twice a year, once from March to August and once from September to February, the MS4 Operator must provide educational messages with information specific to phosphorus to the applicable target audiences within the TMDL watershed focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The SWMP Plan must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the MS4 Operator type). MS4 Operators must document the completion of this requirement in the SWMP Plan.

#### 3. Public Involvement/Participation

No additional requirements.

<sup>4....</sup> 

<sup>&</sup>lt;sup>74</sup> Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

#### 4. Illicit Discharge Detection and Elimination

#### a. Inventory of Potential Phosphorus Sources

Following the completion of Part IX.A.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part IX.A.1.a. for each associated *MS4 outfall*.

#### b. On-site wastewater systems

The *MS4 Operator* must *develop*, implement, and enforce a program that ensures on-site wastewater systems (i.e., septic tanks, cesspools, absorption fields or distribution systems) are properly operated and do not contribute *pollutants* to the *MS4*. To ensure this, the *MS4 Operator* must:

- Once every five (5) years, ensure that residential septic tanks/cesspools are pumped out and system components (i.e., septic tanks, cesspools and installed absorption field) are inspected;
- ii. Ensure the following information is collected and document the completion of this requirement in the *SWMP Plan*:
  - a) Individual performing inspection;
  - b) Inspection date;
  - c) Address;
  - d) Location of system on property; and
  - e) Evidence of failed systems.
- iii. Refer failures to the appropriate agency to ensure corrective actions are taken; and
- iv. Eliminate *illicit discharges* from on-site wastewater systems to the *MS4* in accordance with the time frames specified in Part VI.C.3. or Part VII.C.3, depending on the *MS4 Operator* type.

#### 5. Construction Site Stormwater Runoff Control

- a. The MS4 Operator must include construction projects that disturb between 5000 square feet (sf) and one (1) acre in the construction site runoff control program as described in Part VI.D. or Part VII.D, depending on the MS4 Operator type. Construction projects meeting this threshold are low priority construction sites.
- b. The legal authority used to satisfy Part IV.E.2.b. must include the following language:

"Land activity is defined as *construction activity* including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than 5000 sf and activities disturbing less

- than 5000 sf of total land area that are part of a *larger common plan of development or sale* and will occur under one plan."
- c. High priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).
  - i. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
  - ii. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the SWMP Plan.

#### 6. Post-Construction Stormwater Management

- a. The MS4 Operator must require the use of the Enhanced Phosphorus Removal design standards contained in Chapter 10 of the NYS SWMDM 2015 for all new development and redevelopment projects that disturb greater than or equal to one (1) acre and construction projects less than one acre that are part of a larger common plan of development or sale.
- b. The legal authority used to satisfy Part IV.E. must also meet the following provisions:
  - Land development activities requiring water quantity and quality controls (post-construction *stormwater* runoff controls) must include: "Single-family home construction located in the NYC East of Hudson watershed" and "Single-family residential subdivisions located in the NYC East of Hudson watershed."
- c. Requirements for SWPPPs that include post-construction stormwater controls must include: "Post-construction SMPs in the SWPPP must be designed in conformance with Chapter 10 of the NYS SWMDM 2015 for Enhanced Phosphorus Removal Design Standards."
- d. Performance Standards must include the following enhanced stabilization requirements: "For construction sites located in the NYC East of Hudson watershed, where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected must be in conformance with the NYS E&SC 2016."
- e. Inspections of land development activities during construction must include requirements for a *qualified inspector* to conduct two (2) site inspections every seven (7) calendar days for single-family homes, and single-family residential, subdivisions within the NYC East of Hudson watersheds.

#### f. Retrofit program

- i. All MS4 Operators identified within the Croton Watershed Phase II TMDL Implementation Plan, January 2009, must continue to implement the retrofit program according to the following schedule:
  - a) Within one (1) year of the EDC, the *MS4 Operator* must submit to the *Department* a *retrofit* plan that identifies the following:
    - i) Project name;
    - ii) Location;
    - iii) Proposed retrofit type;
    - iv) Anticipated date for construction;
    - v) Estimated phosphorus reduction (using the criteria in the Croton Watershed Phase II TMDL Implementation Plan, January 2009);
       and
    - vi) Estimated total phosphorus reduction for all projects demonstrating they will meet the reduction specified in the Croton Watershed Phase II TMDL Implementation Plan, January 2009.
  - b) Within five (5) years of the EDC, all *retrofit* projects must be constructed to achieve the five (5) year phosphorus reduction assigned to the *MS4 Operator*, as required by the Croton Watershed Phase II TMDL Implementation Plan, January 2009.
- ii. Annually, by December 31, *MS4 Operators* (or *RSE* representing *MS4 Operators* as described in Part III.B.2.b.) must submit to the *Department* any changes made to the *retrofit* plan including the information in Part IX.A.6.e.i.
- iii. *MS4 Operators* must document the retrofit program in the *SWMP Plan* specifying:
  - a) Progress on *retrofit* projects already commenced; and
  - b) Identification of retrofit projects for the upcoming construction season;
     and
  - c) Certification that completed retrofit projects have been constructed in accordance with the *retrofit* plans.

#### 7. Pollution Prevention/Good Housekeeping

a. Twice a year, once from March to August and once from September to February, all *catch basins* located in the TMDL watershed(s) must be inspected (Part VI.F.3.c. or Part VII.F.3.c, depending on the MS4 Operator type). MS4 Operators must document the completion of this requirement in the SWMP Plan.

- b. Following the completion of Part IX.A.1, annually, from April 1 through October 31, all streets located in the TMDL watershed(s) must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins;
  - ii. High-speed limited access highways;
  - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- c. Within six (6) months of MS4 outfall inspection, the MS4 Operator must initiate actions to repair all MS4 outfall protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. MS4 Operators must document the completion of this requirement in the SWMP Plan. Within thirty (30) days of inspection, the MS4 Operator must initiate all necessary maintenance and repair activities discovered for municipally owned or operated post-construction SMPs. MS4 Operators must document the completion of this requirement in the SWMP Plan.
- 8. Planned Upgrades to Municipal Facilities in Watersheds to Impaired Waters

Incorporate, where feasible, <sup>75</sup> cost-effective runoff reduction techniques <sup>76</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

<sup>&</sup>lt;sup>75</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>&</sup>lt;sup>76</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

#### B. Other Phosphorus Impaired Watershed MS4s

Table 5. Other Phosphorus Impaired Watersheds				
Area where Requirements Apply	Greenwood Lake	Onondaga Lake	Oscawana Lake	
EPA Approved TMDL	Impaired Waters Restoration Plan for Greenwood Lake – Total Maximum Daily Load for Total Phosphorus, Sept 2005	Updated Phosphorus Total Maximum Daily Load for Onondaga Lake, June 2012	Total Maximum Daily Load (TMDL) for Phosphorus in Lake Oscawana, September 2008	
Implementation Plan	Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019	None	None	
POC	Phosphorus			
Achievement of Pollutant Load Reduction	In accordance with Implementation Plan	In accordance with approved TMDL	In accordance with approved TMDL	

MS4 Operators located in the watersheds listed in Table 5 must develop and implement the following phosphorus-specific BMPs in addition to the applicable Implementation Plan and applicable requirements in Part VI. or Part VII, depending on the MS4 Operator type:

## 1. Mapping

In accordance with the timeframes listed below, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24,000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Within three (3) years of the EDC, include areas with potential to contribute phosphorus to the TMDL waterbody, which include:
  - Retail and wholesale plant nurseries (including big box stores);
  - ii. Commercial lawn care facilities;
  - iii. Golf courses; and
  - iv. Commercial or industrial yard waste storage areas (e.g., yard waste composting and disposal areas).
- b. Within three (3) years of the EDC, include the following information for all post-construction *SMPs* as identified in the post-construction *SMP* inventory (Part VI.E.2. or Part VII.E.2, depending on the *MS4 Operator* type):

- i. Type<sup>77</sup>; and
- ii. Ownership.

#### 2. Public Education and Outreach on Stormwater Impacts

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part IX.B.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to phosphorus to the applicable target audiences within the TMDL watershed focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- c. Twice a permit term, separated by a minimum of one (1) year, the *MS4*Operator must educate residential on-site wastewater system users on the on-site wastewater inspection program described in Part IX.B.4.c and proper maintenance practices. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

#### 3. Public Involvement/Participation

No additional requirements.

## 4. Illicit Discharge Detection and Elimination

a. Inventory of Potential Phosphorus Sources

Following the completion of Part IX.B.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.B.1.a. for each associated MS4 outfall.

b. On-site wastewater systems

The MS4 Operator (with the exclusion of MS4 Operators located in the Onondaga Lake watershed) must develop, implement, and enforce a program that ensures residential on-site wastewater systems (i.e., septic tanks,

<sup>&</sup>lt;sup>77</sup> Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

cesspools, absorption fields or distribution systems) are properly operated and do not contribute *pollutants* to the *MS4*. The *MS4 Operator* must:

- i. Once every five (5) years, ensure that residential septic tanks/cesspools are pumped out and system components (i.e., septic tanks, cesspools and installed absorption field) are inspected;
- ii. Ensure the following information is collected and document the completion of this requirement in the *SWMP Plan*:
  - a) Individual performing inspection;
  - b) Inspection date;
  - c) Address;
  - d) Location of system on property;
  - e) Inspection rating (pass/fail);
  - f) Evidence of failed systems;
- iii. Refer failures to the appropriate agency to ensure corrective actions are taken; and
- iv. Eliminate *illicit discharges* from on-site wastewater systems to the *MS4* in accordance with the time frames specified in Part VI.C.3. or Part VII.C.3, depending on the *MS4 Operator* type.

#### 5. Construction Site Stormwater Runoff Control

High priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the SWMP Plan.

#### 6. Post Construction Stormwater Management

- a. The *MS4 Operator* must require the use of the Enhanced Phosphorus Removal design standards contained in Chapter 10 of the NYS SWMDM 2015 for all new development and redevelopment projects within the listed watersheds.
- b. The legal authority used to satisfy Part IV.E.2.b. must also include the following language requiring the use of the Enhanced Phosphorus Removal

Design Standards in accordance with the NYS SWMDM 2015 for the applicable watershed:

"Land development activities requiring water quantity and quality controls (post-construction *stormwater* runoff controls) must include: "Single-family home construction located in the <insert watershed name> watershed" and "Single-family residential subdivisions located in the <insert watershed name> watershed."

- c. Requirements for SWPPPs that include post-construction stormwater controls must include: "Post-construction SMPs in the SWPPP must be designed in conformance with the Enhanced Phosphorus Removal Design Standards in the NYS SWMDM 2015."
- d. Performance Standards must include the following enhanced stabilization requirements: "Where soil disturbance activity has temporarily or permanently ceased, the construction site is located in the *insert watershed name* watershed, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected must be in conformance with the Erosion Control Manual."
- e. Inspections of land development activities during construction must include requirements for a *qualified inspector* to conduct two (2) site inspections every seven (7) calendar days for single-family homes and subdivisions within the *<insert watershed name>* watersheds.

# f. Retrofit program

- i. All *MS4 Operators* identified within the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019, must continue to implement the *retrofit* program according to the following schedule:
  - a) Within one (1) year of the EDC, the *MS4 Operator* must submit to the *Department* a *retrofit* plan that identifies the following:
    - i) Project name;
    - ii) Location;
    - iii) Proposed retrofit type;
    - iv) Anticipated date for construction;
    - v) Estimated phosphorus reduction (using the criteria in the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019); and
    - vi) Estimated total phosphorus reduction for all projects demonstrating they will meet the reduction specified in the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019.
  - b) Within five (5) years of the EDC, all *retrofit* projects must be constructed to achieve the five (5) year phosphorus reduction assigned

- to the *MS4 Operator*, as required by the Greenwood Lake Watershed Phosphorus TMDL Implementation Plan, October 2019.
- ii. Annually, by December 31, *MS4 Operators* (or *RSE* representing *MS4 Operators* as described in Part III.B.2.b.) must submit to the *Department* any changes made to the *retrofit* plan including the information in Part IX.A.6.e.i.
- iii. *MS4 Operators* must document the retrofit program in the *SWMP Plan* specifying:
  - a) Progress on retrofit projects already commenced; and
  - b) Identification of retrofit projects for the upcoming construction season;
     and
  - c) Certification that completed retrofit projects have been constructed in accordance with the *retrofit* plans.

#### 7. Pollution Prevention/Good Housekeeping

Following the completion of Part IX.B.1:

- a. Annually, from April 1 through October 31, all streets located in the TMDL watershed(s) must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins;
  - ii. High-speed limited access highways; or
  - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.
- b. Within six (6) months of MS4 outfall inspection, the MS4 Operator must initiate actions to repair all MS4 outfall protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. MS4 Operators must document the completion of this requirement in the SWMP Plan.
- c. Within thirty (30) days of inspection, the *MS4 Operator* must initiate all necessary maintenance and repair activities discovered for *municipally* owned or operated post-construction *SMPs. MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

#### 8. Planned Upgrades to Municipal Facilities in Watersheds to Impaired Waters

Incorporate, where feasible,<sup>78</sup> cost-effective runoff reduction techniques<sup>79</sup> during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

# C. Pathogen Impaired Watersheds MS4s

No Pathogen TMDL requirements.

# D. Nitrogen Impaired Watershed MS4s

Table 6. Nitrogen Impaired Watershed(s)			
Area where Requirements Apply	Peconic		
EPA Approved TMDL	TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries (September 2007)		
Implementation Plan	TMDL for Nitrogen in the Peconic Estuary Program Study Area, Including Waterbodies Currently Impaired Due to Low Dissolved Oxygen: the Lower Peconic River and Tidal Tributaries; Western Flanders Bay and Lower Sawmill Creek; and Meetinghouse Creek, Terry Creek and Tributaries (September 2007)		
POC	Nitrogen		
Pollutant Load Reduction	In accordance with approved TMDL		
Waterbodies	Terrys Creek & Tributaries		
	Meetinghouse Creek		
	Western Flanders Bay & Lower Sawmill Creek		
	Lower Peconic River and tidal tributaries		

<sup>&</sup>lt;sup>78</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

<sup>&</sup>lt;sup>79</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

MS4 Operators located in the watersheds listed in Table 6 must develop and implement the following nitrogen-specific BMPs in addition to the applicable Implementation Plan and applicable requirements in Part VI. or Part VII, depending on the MS4 Operator type:

#### 1. Mapping

Within three (3) years of the EDC, the *MS4 Operator* must update, in geographic information system (GIS) format with a scale of 1:24000 or finer, the comprehensive system mapping (Part IV.D.) to include:

- a. Areas with potential to contribute nitrogen to the *TMDL* waterbody, which include:
  - i. Retail and wholesale plant nurseries (including big box stores);
  - ii. Commercial lawn care facilities:
  - iii. Golf courses; and
  - iv. Commercial or Industrial yard waste storage areas (e.g., yard waste composting and disposal areas).
- Information for all post-construction SMPs as identified in the postconstruction SMP inventory (Part VI.E.2. or Part VII.E.2, depending on the MS4 Operator type):
  - i. Type;80 and
  - ii. Ownership of SMP.

#### 2. Public Education and Outreach on Stormwater Impacts

- a. Within six (6) months of the EDC, the *MS4 Operator* must make available information on any how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.
- b. Following the completion of Part IX.D.1, twice a year, once from March to August and once from September to February, the *MS4 Operator* must provide educational messages with information specific to nitrogen to the applicable target audiences within the TMDL watershed focus area, identified in Part VI.A.1.b. or Part VII.A.1.b, depending on the MS4 Operator type. The *SWMP Plan* must be updated with changes made to public education and outreach program (Part VI.A. or Part VII.A, depending on the *MS4 Operator* type). *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

<sup>&</sup>lt;sup>80</sup> Post-construction *SMP* types are defined in the New York State Department of Environmental Conservation Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017).

#### 3. Public Involvement/Participation

No additional requirements.

#### 4. Illicit Discharge Detection and Elimination

Following the completion of Part IX.D.1, within five (5) years of the EDC, the MS4 Operator must include on the *MS4 outfall* inventory (Part VI.C.1.c. or Part VII.C.1.c, depending on the MS4 Operator type) the number of each item identified in Part VIII.D.1.a. for each associated MS4 outfall.

#### 5. Construction Site Stormwater Runoff Control

High priority construction sites must be inspected during active construction after the pre-construction meeting (Part VI.D.7. or Part VII.D.7, depending on the *MS4 Operator* type).

- a. If the *MS4 Operator* is completing the inspection, the construction site must be inspected every ninety (90) days; or
- b. If the *MS4 Operator* utilizes the *qualified inspector's* weekly inspection reports, as required by the CGP, to satisfy this requirement, the *MS4 Operator* must inspect the construction site once every six (6) months, or sooner if any deficiencies are noted that require attention.

MS4 Operators must document the construction site inspections in the SWMP Plan.

## 6. Post-Construction Stormwater Management

The *MS4 Operator* must ensure on-site retention of the 1-year storm or greater from new development or redevelopment projects using runoff reduction techniques<sup>81</sup> selected from the NYS SWMDM 2015.

#### 7. Pollution Prevention/Good Housekeeping

Following the completion of Part IX.D.1:

- a. Annually, from April 1 through October 31, all streets located in the TMDL watershed(s) must be swept. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*. This requirement is not applicable to:
  - i. Uncurbed roads with no catch basins:
  - ii. High-speed limited access highways; or
  - iii. Roads defined as interstates, freeways and expressways, or arterials by the United States Department of Transportation, Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013.

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<sup>&</sup>lt;sup>81</sup> Runoff reduction techniques can be found in Chapters 4 and 5 of the NYS SWMDM 2015.

- b. Within six (6) months of MS4 outfall inspection, the MS4 Operator must initiate actions to repair all MS4 outfall protection and/or bank stability problems identified during the inspection. Repairs must be completed in accordance with the NYS E&SC 2016. MS4 Operators must document the completion of this requirement in the SWMP Plan.
- c. Within thirty (30) days of inspection, the *MS4 Operator* must initiate all necessary maintenance and repair activities discovered for *municipally* owned or operated post-construction *SMPs*. *MS4 Operators* must document the completion of this requirement in the *SWMP Plan*.

# 8. Planned Upgrades to Municipal Facilities in Watersheds to Impaired Waters

Incorporate, where feasible, 82 cost-effective runoff reduction techniques 68 during planned *municipal* upgrades including *municipal* right of ways (e.g., bioswales, green streets, porous pavement, replacement of closed drainage with grass swales, replacement of the existing islands in the parking lots with bioretention or curb cuts to route the flow through below-grade infiltration areas or other low-cost improvements that provide runoff treatment or reduction).

<sup>&</sup>lt;sup>82</sup> Consideration of feasibility should include type of land use or *municipal operation*, suitability of soils, presence of utilities, potential for exacerbating existing contamination problems, safety issues, maintenance requirements, and expected lifespans of available technologies.

# Part X. Standard Permit Conditions

For the purposes of this *SPDES* general permit, examples of contractors and subcontractors include:

# A. Duty to Comply

The owner/operator, and all contractors or subcontractors, must comply with all terms and conditions of this *SPDES* general permit. Any non-compliance with the terms and conditions of this *SPDES* general permit constitutes a violation of the New York State Environmental Conservation Law, and its implementing regulations, and is grounds for enforcement action. Filing of a request for transfer or termination of coverage under this *SPDES* general permit, or a notification of planned changes or anticipated non-compliance, does not limit, diminish or stay compliance with any terms and conditions of this *SPDES* general permit.

#### B. Need to Halt or Reduce Activity is Not a Defense

The necessity to halt or reduce the activity regulated by this *SPDES* general permit, in order to maintain compliance with the conditions of this *SPDES* general permit, shall not be a defense in an enforcement action.

#### C. Penalties

There are substantial criminal, civil, and administrative penalties associated with violating the terms and conditions of this *SPDES* general permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

#### D. False Statements

Any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this *SPDES* general permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished in accordance with New York State Environmental Conservation Law §71-1933 and or New York State Penal Law Articles 175 and 210.

# E. Reopener Clause

Upon issuance of this *SPDES* general permit, a determination has been made on the basis of a submitted Notice of Intent, plans, or other available information, that compliance with the specified general permit terms and conditions will reasonably protect classified water use and assure compliance with applicable *water quality standards*. Satisfaction of the conditions of this *SPDES* general permit notwithstanding, if operation pursuant to this *SPDES* general permit causes or contributes to a condition in contravention of State *water quality standards* or guidance values, or if the *Department* determines that a modification is necessary to prevent impairment of the best use of the waters or to assure maintenance of *water* 

quality standards or compliance with other provisions of New York State Environmental Conservation Law Article 17 or the Clean Water Act, or any regulations adopted pursuant thereto, the *Department* may require such modification and the Commissioner may require abatement action to be taken by the owner/operator and may also prohibit such operation until the modification has been implemented.

# F. Duty to Mitigate

The owner/operator, and its contractors and subcontractors, shall take all reasonable steps to minimize or prevent any *discharge* in violation of this *SPDES* general permit which has a reasonable likelihood of adversely affecting human health or the environment.

# G. Requiring Another General Permit or Individual SPDES Permit

The *Department* may require any discharger authorized to *discharge* in accordance with this *SPDES* general permit to apply for and obtain an individual *SPDES* permit or apply for authorization to *discharge* in accordance with another general permit.

- (1) Cases where an individual *SPDES* permit or authorization to *discharge* in accordance with another general permit may be required include, but is not limited to the following:
  - (i) the discharger is not in compliance with the conditions of this *SPDES* general permit or does not meet the criteria for coverage under this *SPDES* general permit;
  - (ii) a change has occurred in the availability of demonstrated technology or practices for the control or abatement of *pollutants* applicable to the point source;
  - (iii) new effluent limitation guidelines or new source performance standards are promulgated that are applicable to point sources authorized to *discharge* in accordance with this *SPDES* general permit;
  - (iv) existing effluent limitation guidelines or new source performance standards that are applicable to point sources authorized to *discharge* in accordance with this *SPDES* general permit are modified;
  - (v) a water quality management plan containing requirements applicable to such point sources is approved by the *Department*;
  - (vi) circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under this *SPDES* general permit, or either a temporary or permanent reduction or elimination of the authorized *discharge* is necessary;
  - (vii) the *discharge* is in violation of section 17-0501 of the New York State Environmental Conservation Law:
  - (viii) the *discharge*(s) is a significant contributor of *pollutants*. In making this determination, the *Department* may consider the following factors:

- (a) the location of the *discharge*(s) with respect to waters of New York State;
- (b) the size of the discharge(s);
- (c) the quantity and nature of the *pollutants discharged* to waters of New York State; and
- (d) other relevant factors including compliance with other provisions of New York State Environmental Conservation Law Article 17, or the Clean Water Act.
- (1) When the *Department* requires any discharger authorized by this *SPDES* general permit to apply for an individual *SPDES* permit as provided for in this subdivision, it shall notify the discharger in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time for the owner/operator to file the application for an individual *SPDES* permit, and a deadline, not sooner than 180 days from the owner/operator's receipt of the notification letter, whereby the authorization to discharge under this *SPDES* general permit shall be terminated. The *Department* may grant additional time upon demonstration, to the satisfaction of the Regional Water Engineer, that additional time to apply for an alternative authorization is necessary or where the *Department* has not provided a permit determination in accordance with 6 NYCRR Part 621.
- (2) When an individual *SPDES* permit is issued to a discharger authorized to discharge under this *SPDES* general permit for the same discharge(s), this *SPDES* general permit authorization for outfalls authorized under the individual *SPDES* permit is automatically terminated on the effective date of the individual *SPDES* permit unless termination is earlier in accordance with 6 NYCRR Part 750.

# **H. Duty to Provide Information**

The owner/operator shall furnish to the *Department*, within five (5) business days, unless otherwise set forth by the *Department*, any information that the *Department* may request to determine whether cause exists to determine compliance with this *SPDES* general permit or to determine whether cause exists for requiring an individual *SPDES* permit in accordance with 6 NYCRR 750-1.21I (see G. Requiring Another General Permit or Individual Permit). The owner/operator shall make available to the *Department*, for inspection and copying, or furnish to the *Department* within 25 business days of receipt of a *Department* request for such information, any information retained in accordance with this *SPDES* general permit. Where the owner/operator becomes aware that it failed to submit any relevant facts on the Notice of Intent, or submitted incorrect information in a Notice of Intent or in any report to the *Department*, the owner/operator shall promptly submit such facts or corrected information to the *Department*.

#### I. Extension

In the event a new *SPDES* general permit is not issued prior to the expiration of this *SPDES* general permit, and this *SPDES* general permit is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, then the owner/operator

with coverage under this SPDES general permit may continue to operate and discharge in accordance with the terms and conditions of this SPDES general permit until a new SPDES general permit is issued.

#### J. Signatories and Certification

The Notice of Intent, Notice of Termination and reports required by this *SPDES* general permit shall be signed as provided in 40 CFR §122.22

- (a) All Notices of Intent and Notices of Termination shall be signed as follows:
  - (1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
    - (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
    - (ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for Notice of Intent or Notice of Termination requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: The *Department* does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR §122.22(a)(1)(i). The *Department* will presume that these responsible corporate officers have the requisite authority to sign the Notice of Intent or Notice of Termination unless the corporation has notified the *Department* to the contrary. Corporate procedures governing authority to sign a Notice of Intent or Notice of Termination may provide for assignment or delegation to applicable corporate positions under 40 CFR §122.22(a)(1)(ii) rather than to specific individuals.

- (2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or
- (3) For a *municipality*, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
  - (i) The chief executive officer of the agency, or
  - (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

- (b) All reports required by this *SPDES* general permit, and other information requested by the *Department* shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - (1) The authorization is made in writing by a person described in (a);
  - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (A duly authorized representative may thus be either a named individual or any individual occupying a named position.), and
    - (3) The written authorization is submitted to the *Department*.
- (c) Changes to authorization. If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or activity, a new authorization satisfying the requirements of (b) must be submitted to the *Department* prior to or together with any reports, information, or applications to be signed by an authorized representative.
- (d) Certification. Any person signing a document under (a) or (b) shall make the following certification:
  - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
  - (e) Electronic reporting. If documents described in (a) or (b) are submitted electronically by or on behalf of the activity with coverage under this SPDES general permit, any person providing the electronic signature for such documents shall meet all relevant requirements of this section, and shall ensure that all of the relevant requirements of 40 CFR Part 3 (including, in all cases, subpart D to Part 3) (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

# K. Inspection & Entry

The owner/operator shall allow the *Department*, the USEPA Regional Administrator, the applicable county health department, or any authorized representatives of those entities, upon the presentation of credentials and other documents as may be required by law, to:

- (a) enter upon the owner/operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this *SPDES* general permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this *SPDES* general permit, including records required to be maintained for purposes of operation and maintenance;
- (c) inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this *SPDES* general permit;
- (d) sample or monitor at reasonable times, for the purposes of assuring *SPDES* general permit compliance or as otherwise authorized by the Clean Water Act or New York State Environmental Conservation Law, any substances or parameters at any location; and
- (e) enter upon the property of any contributor to the regulated facility or activity under authority of the owner/operator.

# L. Confidentiality of Information

The following shall not be held confidential: this *SPDES* general permit, the fact sheet for this *SPDES* general permit, the name and address of any owner/operator, effluent data, the Notice of Intent, and information regarding the need to obtain an individual permit or an alternative general permit. This includes information submitted on forms themselves and any attachments used to supply information required by the forms (except information submitted on usage of substances). Upon the request of the owner/operator, the *Department* shall make determinations of confidentiality in accordance with 6 NYCRR Part 616, except as set forth in the previous sentence. Any information accorded confidential status shall be disclosed to the Regional Administrator upon his or her written request. Prior to disclosing such information to the Regional Administrator, the *Department* will notify the Regional Administrator of the confidential status of such information.

# M. Other Permits May Be Required

Nothing in this *SPDES* general permit relieves the owner/operator from a requirement to obtain any other permits required by law.

# N. Property Rights

Coverage under this *SPDES* general permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations, nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the *discharge* authorized.

# O. Compliance with Interstate Standards

If the activity covered by this *SPDES* general permit originates within the jurisdiction of an interstate water pollution control agency, then the activity must also comply

with any applicable effluent standards or *water quality standards* promulgated by that interstate agency and as set forth in this *SPDES* general permit for such activities.

#### P. Oil & Hazardous Substance Liability

Coverage under this *SPDES* general permit does not affect the imposition of responsibilities upon, or the institution of any legal action against, the owner or operator under section 311 of the Clean Water Act, which shall be in conformance with regulations promulgated pursuant to section 311 governing the applicability of section 311 of the Clean Water Act to *discharges* from facilities with NPDES permits, nor shall such issuance preclude the institution of any legal action or relieve the owner or operator from any responsibilities, liabilities, or penalties to which the owner or operator is or may be subject pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. section 9601 et seq. (CERCLA).

#### Q. Severability

The provisions of this *SPDES* general permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

# **Appendix A. Acronyms and Definitions**

#### **Acronym List**

BMP - Best Management Practice

CFR – Code of Federal Regulations

CGP – SPDES General Permit for Stormwater from Construction Activities, GP-0-20-001

CWA – Clean Water Act

ECL - Environmental Conservation Law

EDC - Effective Date of Coverage

EDP- Effective Date of the Permit

eNOI - Electronic Notice of Intent

EPCRA - Emergency Planning and Community Right-To-Know Act

ERP – Enforcement Response Plan

IDDE – Illicit Discharge Detection and Elimination

MCM - Minimum Control Measure

MS4 – Municipal Separate Storm Sewer System

MS4 GP – SPDES General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems, GP-0-24-001

MSGP – SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-23-001

NOI – Notice of Intent

NPDES – National Pollutant Discharge Elimination System

NYCRR – New York Codes, Rules and Regulations

NYS DEC – New York State Department of Environmental Conservation

O&M – Operations and Maintenance

ORI – Outfall Reconnaissance Inventory

POC – Pollutant of Concern

RSE – Regional Stormwater Entity

SPDES – State Pollutant Discharge Elimination System

SMP – Stormwater Management Practice

SWMP – Stormwater Management Program

SWMP Plan – Stormwater Management Program Plan

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USEPA – United States Environmental Protection Agency

#### **Definitions**

All definitions in this section are solely for the purposes of this permit. If a word is not defined below, use it how it is commonly defined.

**Additionally Designated Areas** – those areas that meet the additional designation criteria, Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (*MS4*s), January 2010, revised January 2023 and found in Appendix B.

Additionally Designated Area MS4 Outfall (ADA MS4 outfall) – any point of stormwater discharge from pipes, ditches, and swales, as well as other points of concentrated flow, to impaired waters listed in Appendix C from an MS4 Operator's MS4. Areas of sheet flow which drain to impaired waters listed in Appendix C are not considered ADA MS4 outfalls.

**Automatically Designated Areas** – those areas served by *MS4*s that meet the automatic designation criteria, Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (*MS4*s), January 2010, revised January 2023 and found in Appendix B.

**Best Management Practice (BMP)** – schedules of activities, practices, and prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spillage and leaks, sludge or waste disposal, or drainage from areas that could contribute pollutants to *stormwater discharges*.

**Catch Basin(s)** – a cistern, vault, chamber, or well that is part of the MS4 and designed to capture trash, sediment, and/or debris in its *sump*.

**Construction Activity(ies)** – any clearing, grading, excavation, demolition or stockpiling activity that results in soil disturbance. Clearing activities can include but are not limited to logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. *Construction activity* does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

**Department** – the New York State *Department* of Environmental Conservation as well as meaning the *Department*'s designated agent.

**Develop (Developed)** – for *MS4 Operators* continuing coverage, *develop* means to continue to implement their current SWMP and update the SWMP to comply with the permit requirement; for newly designated *MS4 Operators*, *develop* means to create that permit requirement.

**Discharge (Discharging)** – any addition of any pollutant to *surface waters of the State* through an outlet or point source (6 NYCRR 750-1.2(a)(28)).

**Dry Weather** – prolonged dry periods (at least 48 hours after the last runoff event).

**Groundwater** – waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

**Illicit Discharge** – any *discharge* into an *MS4* that is not entirely composed of *stormwater*, except those identified in Part I.A.3. Examples of *illicit discharges* are non-permitted sanitary sewage, garage drain effluent, and waste motor oil. However, an *illicit discharge* could be any other non-permitted discharge which the *MS4 Operator* or *Department* has determined to be a substantial contributor of pollutants to the *MS4*. *Illicit discharges* can occur throughout the *MS4*, including at post-construction *SMPs*.

**Industrial Activity** – the eleven (11) categories of industrial activities included in the definition of "*stormwater discharges* associated with industrial activity," as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

**Interconnection** – any point of *stormwater discharge* from pipes, ditches, and swales, as well as other points of concentrated flow, where the *MS4 Operator*'s *MS4* is *discharging* to another *MS4* or private storm sewer system. Areas of *sheet flow* which drain to another *MS4* or private storm sewer system are not considered *interconnections*.

**Intermittent Discharge** – a *discharge* which occurs over a shorter period of time (e.g., a few hours per day or a few days per year) (CWP 2004).

Larger Common Plan of Development or Sale – a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, State Environmental Quality Review Act Application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a *larger common plan of development or sale* that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

**MS4 Operator** – the person, persons, or legal entity that obtains coverage and is responsible for the *MS4*.

**MS4 Outfall** – any point of *stormwater discharge* from pipes, ditches, and swales, as well as other points of concentrated flow, to *surface waters of the State* from an *MS4 Operator's MS4*. Areas of *sheet flow* which drain to *surface waters of the State* are not considered *MS4 outfalls*.

**Municipal (Municipally)** – a county, town, city, village, district corporation, special improvement district, sewer authority or agency thereof. Examples of other public entities that are included in this program include State University Campuses, federal and State prisons, State and federal hospitals, Dormitory Authorities, public housing authorities, school and other special districts.

**Municipal Facility** – an *MS4 Operator* owned and/or operated facility with the potential to *discharge* pollutants to the *MS4* and/or *surface water of the State* of the State.

**Municipal Facility Intraconnection** – any point where stormwater is conveyed from the MS4 Operator's municipal facility to the MS4 Operator's own MS4. This is the most down-drainage end of the MS4 infrastructure located on the municipal facility prior to discharge to the MS4.

**Municipal Operations (Operations)** – activities conducted by the MS4 Operator with the potential to discharge pollutants to the *MS4* and/or *surface water of the State*.

**Municipal Separate Storm Sewer System** (*MS4*) – a conveyance or system of conveyances (including roads with drainage systems, *municipal* streets, *catch basins*, curbs, gutters, ditches, man-made channels, or storm drains):

- 1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that discharges to surface waters of the State;
- 2. designed or used for collecting or conveying stormwater;
- 3. which is not a combined sewer; and
- 4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant Discharge Elimination System** – the national system for the issuance of wastewater and *stormwater* permits under the Federal Water Pollution Control Act (Clean Water Act).

**No Exposure** – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff.

**Non-traditional MS4 Operators**— state, federal, county and other publicly owned properties such as state university campuses, prisons, office complexes, hospitals, military installations public housing authorities, school and other special districts.

**Obvious Illicit Discharge** –an *illicit discharge* from a flowing *MS4 outfall* that does not require sample collection for confirmation; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Outfall Characterization.

**Physical Indicator Present in the Flow** – a sensory indicator present in the *discharge* from *monitoring location* including odor, color, turbidity and floatables; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 4: Physical Indicators for Flowing Monitoring Locations Only.

Physical Indicator not Related to Flow – an indicator of past discharges, potentially intermittent or transitory discharge, including monitoring location damage, monitoring location deposits or stains, abnormal vegetation growth, poor pool quality or pipe benthic growth; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 5: Physical Indicators for Both Flowing and Non-Flowing Monitoring Locations. These physical indicators can be present at both flowing and non-flowing monitoring locations.

**Pollutant** – dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, *municipal*, agricultural waste and ballast *discharged* into water; which may cause or might reasonably be expected to cause pollution of the waters of the State in contravention of the standards or guidance values adopted as provided in Parts 700 et seq of this Title. For the purposes of this *SPDES* general permit, relevant pollutants include, but are not limited to, nitrogen, phosphorus, chloride, silt and sediment, pathogens, herbicides/pesticides, floatables, petroleum hydrocarbons, heavy metals, and polycyclic aromatic hydrocarbons (PAHs).

**Pollutant of Concern (POC)** – a pollutant causing the impairment of an impaired water segment with an approved TMDL and/or listed in Appendix C, including phosphorus, silt/sediment, pathogens, nitrogen, and floatables.

**Privately Owned/Operated** – not owned/operated by the *MS4 Operator* or another *MS4 Operator*.

**Publicly Owned/Operated** – owned/operated by the *MS4 Operator*.

**Qualified Inspector** – a person who is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other *Department* endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct

supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of *Department* endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other *Department* endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect must receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *qualified professional* qualifications in addition to the *qualified inspector* qualifications.

Note: Inspections of any post-construction *SMPs* that include structural components, such as a dam for an impoundment, must be performed by a licensed Professional Engineer.

**Qualified Professional** – a person who is knowledgeable in the principles and practices of *stormwater* management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect, or other *Department* endorsed individual(s). Individuals preparing SWPPPs that require the post-construction *SMP* component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics in order to prepare a SWPPP that conforms to the *Department's* technical standard. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), must be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

**Qualifying Storm Event** – a storm event with at least 0.1 inch of precipitation, providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived if the preceding measurable storm did not result in a *stormwater discharge* (e.g., a storm events in excess of 0.1 inches may not result in a *stormwater discharge* at some facilities), or if the *MS4 Operator* is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

**Regional Stormwater Entity (RSE)** – an organization made up of multiple cooperating regulated and/or nonregulated entities located in the same geographical region of the State who share resources to improve overall *stormwater* management in their area.

**Retrofit** – to modify or add to existing *stormwater* infrastructure for the purpose of reducing pollutant loadings.

**Sheet Flow** – *stormwater* runoff flowing in a thin layer over the ground surface.

**Sizing Criteria** – the criteria included in the CGP that are used to size post-construction *stormwater* management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

**State Pollutant Discharge Elimination System** (SPDES) – the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing *discharges* to the waters of the State.

**Stormwater** – that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the State.

**Stormwater Hotspots** - a land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical *stormwater* runoff, based on monitoring studies. For further detail, see Section 4.11 of the NYS SWMDM 2015.

**Stormwater Management Practices (SMPs)** – measures, either structural or nonstructural, that are constructed as part of new development or redevelopment projects and are intended to capture, treat, reduce and/or retain *stormwater* runoff.

**Stormwater Management Program (SWMP)** – the program *developed* and implemented by the *MS4 Operator* which provides a comprehensive integrated planning approach involving public participation and, where necessary, intergovernmental coordination, to reduce the *discharge* of POCs and specified pollutants to the *MEP*, using management practices, control techniques and systems, design and engineering methods, and other appropriate provisions. *MS4 Operators* are required at a minimum to *develop*, implement, and enforce a *SWMP* designed to address POCs and reduce the *discharge* of pollutants from the *MS4* to the *MEP*, to protect water quality, and to satisfy the appropriate water quality requirements of the ECL and the Clean Water Act. The *SWMP* must address all permit requirements in this *SPDES* general permit.

**Stormwater Management Program Plan (SWMP Plan)** – is used by the *MS4 Operator* to document and detail the activities and measures that will be implemented to meet the terms and conditions of this *SPDES* general permit. The *SWMP Plan* must be updated during the permit term as the *MS4 Operator's* activities are modified to meet permit conditions. The *SWMP Plan* can be hardcopy or digital.

**Storm-sewershed (sewershed)** – the catchment that drains to a waterbody based on the *MS4* and surface topography. Adjacent catchment areas that drain to the same waterbody are not separate storm-sewersheds.

**Sump** – the part of the *catch basin* between the bottom interior of the *catch basin* and the invert of the deepest outlet of the *catch basin*.

**Surface Water(s) of the State** – must be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that

do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

Waters of the state are further defined in 6 NYCRR Parts 800 to 941. Storm sewers are not waters of the state unless they are classified in 6 NYCRR Parts 800 to 941. Nonetheless, a *discharge* to a storm sewer must be regulated as a *discharge* at the point where the storm sewer *discharges* to waters of the state.

**Suspect Illicit Discharge** – an *illicit discharge* from flowing monitoring locations with high severity (score of 3) on one or more physical indicators based on the relative severity index of physical indicators for flowing *MS4 outfalls* only; this references the Monitoring Locations Inspection and Sampling Field Sheet, adapted from CWP 2004, Section 6: Overall Outfall Characterization.

**Total Maximum Daily Load (TMDL)** – the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL stipulates Waste Load Allocations (WLA) for point source *discharges*, Load Allocations (LA) for nonpoint sources, and a margin of safety (MOS).

**Traditional Land Use Control** *MS4 Operators* – a city, town, or village with land use control authority.

**Traditional Non-land Use Control** *MS4 Operators* – any county agency without land use control.

**Transitory Discharge** – a *discharge* which occurs rarely, usually in response to a singular event such as an industrial spill, ruptured tank, sewer break, transport accident or illegal dumping episode (CWP 2004).

**Water Quality Standard** – such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

# Appendix B. Designation Criteria for Identifying Regulated *Municipal Separate Storm Sewer Systems (MS4s)*, January 2010, revised January 2023

The universe of small *municipal* separate storm sewer systems (*MS4*s) is quite large. However, only a sub-set of small *MS4*s, referred to as "regulated" small *MS4*s, are covered by the Federal *stormwater* regulations. A small *MS4* can be designated as a regulated *MS4* through *automatic designation* by the USEPA or by meeting designation criteria developed by the NPDES permitting authority, the New York State Department of Environmental Conservation (*Department*) in New York State.

### Automatic Designation Criteria Required by USEPA

The USEPA's automatic designation criteria are based strictly on population and density. An area is *automatically designated* if the population is at least 50,000 and has an overall population density of at least 1,000 people per square mile based on the 2000 and 2010 censuses.

### Additional Designation Criteria

The USEPA requires the *Department* to develop a set of criteria for *additionally designated areas*. The following criteria, using a combination of population and environmental factors, have been adopted to designate additional *MS4*s in NYS.

Criterion 1: *MS4*s *discharging* to waters for which an USEPA-approved Total Maximum Daily Load (TMDL) requires reduction of a *pollutant of concern* beyond what can be achieved with existing programs (and the area is not already covered under automatic designation).

Criterion 2: *MS4*s, contiguous to *automatically designated areas* (municipal lines), that *discharge* to sensitive waters classified as AA-Special (fresh surface waters), AA (fresh surface waters) with filtration avoidance determination or SA (saline surface waters).

Criterion 3: Automatically designated areas are extended to town, village, or city boundaries, but only for town, village or city implementation of minimum control measure 4 construction site stormwater runoff control and minimum control measure 5 post-construction stormwater management in development and redevelopment. This additional designation may be waived, by written request to the Department, where the automatically designated area is a small portion of the total area of the town, village or city (less than 15 %) and where there is little or no construction activity in the area outside of the automatically designated area (less than 5 disturbed acres per year).

### **Appendix C. List of Impaired Waters**

#### NOTES FOR THE TABLE BELOW:

- 1. *MS4 Operators* must implement Part VIII.A. Pollutant Specific BMPs for Phosphorus for waterbodies with the pollutant listed as "phosphorus."
- 2. MS4 Operators must implement Part VIII.B. Pollutant Specific BMPs for Silt/Sediment for waterbodies with the pollutant listed as "silt/sediment."
- 3. *MS4 Operators* must implement Part VIII.C. Pollutant Specific BMPs for Pathogens for waterbodies with the pollutant listed as "pathogens" or "fecal coliform."
- 4. *MS4 Operators* must implement Part VIII.D. Pollutant Specific BMPs for Nitrogen for waterbodies with the pollutant listed as "nitrogen" or "ammonia."
- 5. *MS4 Operators* must implement Part VIII.E. Pollutant Specific BMPs for Floatables for waterbodies with the pollutant listed as "garbage & refuse," "oil/grease," or "oil & floating substances."

County	Waterbody Inventory/Priority Waterbody List Name (WI/PWL Number)	Pollutant
Albany	Ann Lee (Shakers) Pond, Stump Pond (1201-0096)	Phosphorus
Bronx	Bronx River, Lower (1702-0006) 18	Fecal Coliform
Bronx	Bronx River, Lower (1702-0006) 18	Garbage & Refuse
Bronx	Bronx River, Middle, and tribs (1702-0106) 18	Fecal Coliform
Bronx	Bronx River, Middle, and tribs (1702-0106) 18	Garbage & Refuse
Bronx	Hutchinson River, Lower, and tribs (1702 0003) 18	Garbage & Refuse
Bronx	Long Island Sound, Western Portion (1702-0027)	Nitrogen
Bronx	Van Cortlandt Lake (1702-0008)	Phosphorus
Bronx	Westchester Creek (1702-0012) 18	Garbage & Refuse
Broome	Minor Tribs to Lower Susquehanna (0603-0044)	Phosphorus
Chautauqua	Chadakoin River and tribs (0202-0018)	Phosphorus
Chautauqua	Lake Erie (Main Lake, South) (0105-0033)	Fecal Coliform
Chautauqua	Lake Erie, Dunkirk Harbor (0105-0009)	Fecal Coliform
Dutchess	Fallkill Creek (1301-0087)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Silt/Sediment
Erie	Delaware Park Pond (0101-0026)	Phosphorus
Erie	Ellicott Creek, Lower, and tribs (0102-0018)	Phosphorus
Erie	Ellicott Creek, Lower, and tribs (0102-0018)	Silt/Sediment

Erie	Green Lake (0101-0038)	Phosphorus
Erie	Lake Erie (Main Lake, North) (0104-0037)	Fecal Coliform
Erie	Lake Erie (Northeast Shoreline) (0104-0036)	Fecal Coliform
Erie	Rush Creek and tribs (0104-0018)	Fecal Coliform
Erie	Rush Creek and tribs (0104-0018)	Phosphorus
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Fecal Coliform
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Oils & Floating Sub.
Erie	Scajaquada Creek, Lower, and tribs (0101-0023)	Phosphorus
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Fecal Coliform
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Oils & Floating Sub.
Erie	Scajaquada Creek, Middle, and tribs (0101-0033)	Phosphorus
Erie	Scajaquada Creek, Upper, and tribs (0101-0034)	Fecal Coliform
Erie	Scajaquada Creek, Upper, and tribs (0101-0034)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs (0101-0036)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and tribs (0101-0036)	Silt/Sediment
Genesee	Tonawanda Cr, Middle, Main Stem (0102-0002)	Phosphorus
Genesee	Tonawanda Cr, Middle, Main Stem (0102-0006)	Fecal Coliform
Herkimer	Mohawk River, Main Stem (1201-0093)	Fecal Coliform
Herkimer	Mohawk River, Main Stem (1201-0093)	Oils & Floating Sub.
Kings	Coney Island Creek (1701-0008) 18	Fecal Coliform
Kings	Coney Island Creek (1701-0008) 18	Garbage & Refuse
Kings	Gowanus Canal (1701 0011) 18	Garbage & Refuse
Kings	Hendrix Creek (1701-0006) 18	Fecal Coliform
Kings	Hendrix Creek (1701-0006) 18	Garbage & Refuse
Kings	Hendrix Creek (1701-0006) 18	Nitrogen
Kings	Mill Basin and tidal tribs (1701 0178) 18	Garbage & Refuse
Kings	Paerdegat Basin (1701-0363) 18	Garbage & Refuse
Kings	Prospect Park Lake (1701-0196)	Phosphorus
Monroe	Buck Pond (0301-0017)	Phosphorus
Monroe	Cranberry Pond (0301-0016)	Phosphorus

Monroe	Long Pond (0301-0015)	Phosphorus
Monroe	Minor Tribs to Irondequoit Bay (0302-0038)	Fecal Coliform
Monroe	Minor Tribs to Irondequoit Bay (0302-0038)	Phosphorus
Monroe	Rochester E-bayment - East (0302-0002)	Fecal Coliform
Monroe	Rochester E-bayment - West (0301-0068)	Fecal Coliform
Monroe	Thomas Creek/White Brook and tribs (0302-0023)	Phosphorus
Nassau	Beaver Lake (1702-0152)	Phosphorus
Nassau	Camaans Pond (1701-0052)	Phosphorus
Nassau	Cold Spring Harbor, and tidal tribs (1702-0018)	Pathogens
Nassau	Dosoris Pond (1702-0024)	Fecal Coliform
Nassau	East Bay (1701-0202)	Fecal Coliform
Nassau	East Meadow Brook, Upper, and tribs (1701-0211)	Silt/Sediment
Nassau	East Rockaway Inlet (1701-0217)	Fecal Coliform
Nassau	Glen Cove Creek, Lower, and tribs (1702-0146)	Fecal Coliform
Nassau	Glen Cove Creek, Lower, and tribs (1702-0146)	Silt/Sediment
Nassau	Grant Park Pond (1701-0054)	Phosphorus
Nassau	Hempstead Bay (1701-0032)	Fecal Coliform
Nassau	Hempstead Harbor, north, and tidal tribs (1702-0022)	Pathogens
Nassau	Hempstead Harbor, south, & tidal tribs (1702-0263)	Fecal Coliform
Nassau	Hempstead Lake (1701-0015)	Phosphorus
Nassau	Long Island Sound, Nassau County Waters (1702-0028)	Fecal Coliform
Nassau	Long Island Sound, Nassau County Waters (1702-0028)	Nitrogen
Nassau	Manhasset Bay, and tidal tribs (1702-0021)	Fecal Coliform
Nassau	Manhasset Bay, and tidal tribs (1702-0141)	Fecal Coliform
Nassau	Massapequa Creek, Upper, and tribs (1701-0174)	Fecal Coliform
Nassau	Massapequa Creek, Upper, and tribs (1701-0174)	Phosphorus
Nassau	Middle Bay (1701-0208)	Fecal Coliform
Nassau	Milburn/Parsonage Creeks, Upp, and tribs (1701-0212)	Phosphorus
Nassau	Mill Neck Creek and tidal tribs (1702-0151)	Pathogens
Nassau	Oyster Bay Harbor (1702-0016)	Pathogens
Nassau	Reynolds Channel, east (1701-0215)	Fecal Coliform

Nassau	Seafords/Seamans Creeks, Upper, and tribs (1701-0201)	Fecal Coliform
Nassau	Shell Creek and Barnums Channel (1701-0213386)	Fecal Coliform
Nassau	South Oyster Bay (1701-0041)	Fecal Coliform
Nassau	Tidal Tribs to Hempstead Bay (1701-0218)	Fecal Coliform
Nassau	Tidal Tribs to Hempstead Bay (1701-0218)	Nitrogen
Nassau	Tidal Tribs to South Oyster Bay (1701-0200)	Fecal Coliform
Nassau	Tribs (fresh) to East Bay (1701-0204)	Fecal Coliform
Nassau	Tribs (fresh) to East Bay (1701-0204)	Phosphorus
Nassau	Tribs (fresh) to East Bay (1701-0204)	Silt/Sediment
Nassau	Tribs to Smith Pond/Halls Pond (1701-0221)	Phosphorus
Nassau	Woodmere Channel (1701-0219)	Fecal Coliform
Nassau	Woodmere Channel (1701-0219)	Nitrogen
New York	East River, Lower (1702-0011) 18	Garbage & Refuse
New York	Harlem River (1702-0004) 18	Garbage & Refuse
New York	Harlem Meer (1702-0103)	Phosphorus
New York	The Lake in Central Park (1702-0105)	Phosphorus
Niagara	Bergholtz Creek and tribs (0101-0004)	Fecal Coliform
Niagara	Bergholtz Creek and tribs (0101-0004)	Phosphorus
Niagara	Hyde Park Lake (0101-0030)	Phosphorus
Oneida	Ballou, Nail Creeks (1201-0203)	Phosphorus
Oneida	Mohawk River, Main Stem (1201-0010)	Fecal Coliform
Oneida	Mohawk River, Main Stem (1201-0094)	Fecal Coliform
Oneida	Utica Harbor (1201-0228)	Fecal Coliform
Onondaga	Bloody Brook and tribs (0702 0006) 10	Fecal Coliform
Onondaga	Ley Creek and tribs (0702 0001) 10	Fecal Coliform
Onondaga	Ley Creek and tribs (0702-0001) 10	Ammonia (NH3)
Onondaga	Ley Creek and tribs (0702-0001) 10	Phosphorus
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Nitrogen (NH3, NO2)
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Phosphorus
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Fecal Coliform
Onondaga	Onondaga Creek, Lower (0702-0023) 10	Ammonia (NH3)
Onondaga	Onondaga Creek, Lower (0702-0023) 10	Fecal Coliform

Onondaga	Onondaga Creek, Lower (0702-0023) 10	Phosphorus
Onondaga	Onondaga Creek, Middle, and tribs (0702-0004) 10	Fecal Coliform
Onondaga	Onondaga Lake, Southern End (0702-0021) [10]	Fecal Coliform
Ontario	Great Brook and minor tribs (0704-0034)	Phosphorus 2
Ontario	Great Brook and minor tribs (0704-0034)	Silt/Sediment
Orange	Greenwood Lake (1501-0001)	Phosphorus
Orange	Monhagen Brook and tribs (1306-0074)	Phosphorus
Orange	Orange Lake (1301-0008) [16]	Phosphorus
Oswego	Lake Neatahwanta (0701-0018)	Phosphorus
Putnam	Bog Brook Reservoir (1302-0041)	Phosphorus
Putnam	Boyd Corners Reservoir (1302-0045)	Phosphorus
Putnam	Croton Falls Reservoir (1302-0026)	Phosphorus
Putnam	Diverting Reservoir (1302-0046)	Phosphorus
Putnam	East Branch Reservoir (1302-0040)	Phosphorus
Putnam	Middle Branch Reservoir (1302-0009)	Phosphorus
Putnam	Oscawana Lake (1301-0035)	Phosphorus
Putnam	Palmer Lake (1302-0103)	Phosphorus
Putnam	West Branch Reservoir (1302-0022)	Phosphorus
Queens	Alley Creek/Little Neck Bay Trib (1702-0009) 18	Fecal Coliform
Queens	Atlantic Ocean Coastline (1701-0014)	Fecal Coliform
Queens	Bergen Basin (1701-0009) 18	Fecal Coliform
Queens	Bergen Basin (1701-0009) 18	Garbage & Refuse
Queens	Bergen Basin (1701-0009) 18	Nitrogen
Queens	East River, Upper (1702-0010) 18	Garbage & Refuse
Queens	East River, Upper (1702-0032) 18	Garbage & Refuse
Queens	Flushing Creek/Bay (1702 0005) 18	Garbage & Refuse
Queens	Flushing Creek/Bay (1702-0005)	Nitrogen
Queens	Flushing Creek/Bay (1702-0005) 18	Fecal Coliform
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005)	Fecal Coliform
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005)	Garbage & Refuse
Queens	Jamaica Bay, Eastern, and tribs, Queens (1701-0005)	Nitrogen

Queens	Kissena Lake (1702-0258)	Phosphorus
Queens	Little Neck Bay (1702-0029)	Fecal Coliform
Queens	Meadow Lake (1702-0030)	Phosphorus
Queens	Newtown Creek and tidal tribs (1702 0002) 18	Garbage & Refuse
Queens	Newtown Creek and tidal tribs (1702-0002) 18	Fecal Coliform
Queens	Shellbank Basin (1701-0001) 18	Nitrogen
Queens	Spring Creek and tribs (1701-0361) 18	Garbage & Refuse
Queens	Thurston Basin (1701-0152) 18	Fecal Coliform
Queens	Thurston Basin (1701-0152) 18	Garbage & Refuse
Queens	Willow Lake (1702-0031)	Phosphorus
Rensselaer	Nassau Lake (1310-0001)	Phosphorus
Richmond	Arthur Kill, Class I, and minor tribs (1701 0010) 18	Garbage & Refuse
Richmond	Arthur Kill, Class SD, and minor tribs (1701-0182) 18	Garbage & Refuse
Richmond	Grassmere Lake/Bradys Pond (1701-0357)	Phosphorus
Richmond	Kill Van Kull (1701 0184) 18	Garbage & Refuse
Richmond	Newark Bay (1701 0183) 18	Garbage & Refuse
Richmond	Raritan Bay, Class SA (1701-0002)	Fecal Coliform
Rockland	Congers Lake, Swartout Lake (1501-0019)	Phosphorus
Rockland	Rockland Lake (1501-0021)	Phosphorus
Rockland	Sparkill Creek, Lower (1301-0088)	Fecal Coliform
Saratoga	Ballston Lake (1101-0036)	Phosphorus
Saratoga	Dwaas Kill and tribs (1101-0007)	Phosphorus
Saratoga	Dwaas Kill and tribs (1101-0007)	Silt/Sediment
Saratoga	Lake Lonely (1101-0034)	Phosphorus
Saratoga	Tribs to Lake Lonely (1101-0001)	Fecal Coliform
Saratoga	Tribs to Lake Lonely (1101-0001)	Phosphorus
Schenectady	Collins Lake (1201-0077)	Phosphorus
Schenectady	Duane Lake (1311-0006)	Phosphorus
Schenectady	Mariaville Lake (1201-0113)	Phosphorus
Suffolk	Acabonack Harbor (1701-0047)	Pathogens
Suffolk	Agawam Lake (1701-0117)	Phosphorus
Suffolk	Beaverdam Creek and tribs (1701-0104)	Ammonia
Suffolk	Bellport Bay (1701-0320)	Pathogens

Suffolk	Big/Little Fresh Ponds (1701-0125)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Silt/Sediment
Suffolk	Centerport Harbor (1702-0229)	Pathogens
Suffolk	Conscience Bay and tidal tribs (1702-0091)	Pathogens
Suffolk	Flanders Bay, East/Center, and tribs (1701-0030)	Pathogens
Suffolk	Flanders Bay, West/Lower Sawmill Creek (1701-0254)	Nitrogen
Suffolk	Flanders Bay, West/Lower Sawmill Creek (1701-0254)	Pathogens
Suffolk	Flax Pond (1702-0240)	Fecal Coliform
Suffolk	Forge River, Lower and Cove (1701-0316)	Fecal Coliform
Suffolk	Fresh Pond (1701-0241)	Phosphorus
Suffolk	Goldsmith Inlet (1702-0026)	Pathogens
Suffolk	Goose Creek (1701-0236)	Pathogens
Suffolk	Great Cove (1701-0376)	Fecal Coliform
Suffolk	Great South Bay, East (1701-0039)	Nitrogen
Suffolk	Great South Bay, Middle (1701-0040)	Nitrogen
Suffolk	Great South Bay, West (1701-0173)	Nitrogen
Suffolk	Hashamomuck Pond (1701-0162)	Pathogens
Suffolk	Heady and Taylor Creeks and tribs (1701-0294)	Pathogens
Suffolk	Huntington Harbor (1702-0228)	Pathogens
Suffolk	Lake Montauk (1701-0031)	Pathogens
Suffolk	Lake Ronkonkoma (1701-0020)	Fecal Coliform
Suffolk	Lake Ronkonkoma (1701-0020)	Phosphorus
Suffolk	Little Sebonac Creek (1701-0253)	Pathogens
Suffolk	Long Island Sound, Suffolk Co, Central (1702-0265)	Fecal Coliform
Suffolk	Mattituck Inlet/Cr, Low, and tidal tribs (1702-0020)	Pathogens
Suffolk	Meetinghouse/Terrys Creeks and tribs (1701-0256)	Pathogens
Suffolk	Mill and Seven Ponds (1701-0113)	Phosphorus
Suffolk	Millers Pond (1702-0013)	Phosphorus
Suffolk	Moriches Bay, East (1701-0305)	Nitrogen
Suffolk	Moriches Bay, West (1701-0038)	Nitrogen
Suffolk	Mt Sinai Harbor and tidal tribs (1702-0019)	Pathogens

Suffolk	Mud Creek, Upper, and tribs (1701-0101)	Fecal Coliform
Suffolk	Narrow Bay (1701-0318)	Pathogens
Suffolk	Nicoll Bay (1701-0375)	Fecal Coliform
Suffolk	North Sea Harbor and tribs (1701-0037)	Pathogens
Suffolk	Northport Harbor (1702-0230)	Pathogens
Suffolk	Northwest Creek and tidal tribs (1701-0046)	Pathogens
Suffolk	Noyack Creek and tidal tribs (1701-0237)	Pathogens
Suffolk	Ogden Pond (1701-0302)	Pathogens
Suffolk	Patchogue Bay (1701-0326)	Pathogens
Suffolk	Peconic River, Lower, and tidal tribs (1701-0259)	Nitrogen
Suffolk	Peconic River, Lower, and tidal tribs (1701-0259)	Pathogens
Suffolk	Penniman Creek and tidal tribs (1701-0300)	Pathogens
Suffolk	Penny Pond, Wells and Smith Creeks (1701-0298)	Pathogens
Suffolk	Phillips Creek, Lower, and tidal tribs (1701-0299)	Fecal Coliform
Suffolk	Port Jefferson Harbor, North, and tribs (1702-0015)	Pathogens
Suffolk	Quantuck Bay (1701-0042)	Pathogens
Suffolk	Quantuck Bay (1701-0042)	Nitrogen
Suffolk	Quantuck Canal/Moneybogue Bay (1701-0371)	Pathogens
Suffolk	Quogue Canal (1701-0301)	Fecal Coliform
Suffolk	Reeves Bay and tidal tribs (1701-0272)	Pathogens
Suffolk	Richmond Creek and tidal tribs (1701-0245)	Pathogens
Suffolk	Sag Harbor and Sag Harbor Cove (1701-0035)	Pathogens
Suffolk	Sebonac Cr/Bullhead Bay and tidal tribs (1701-0051)	Pathogens
Suffolk	Setauket Harbor (1702-0242)	Pathogens
Suffolk	Shinnecock Bay and Inlet (1701 0033)	Nitrogen
Suffolk	Stirling Creek and Basin (1701-0049)	Pathogens
Suffolk	Stony Brook Harbor and West Meadow Creek (1702-0047)	Pathogens
Suffolk	Tidal Tribs to Gr Peconic Bay, Northshr (1701-0247)	Pathogens
Suffolk	Tidal Tribs to West Moriches Bay (1701-0312)	Fecal Coliform
Suffolk	Tidal Tribs to West Moriches Bay (1701-0312)	Nitrogen
Suffolk	Town/Jockey Creeks and tidal tribs (1701-0235)	Pathogens
Suffolk	Tuthill, Harts, Seatuck Coves (1701-0309)	Pathogens
Suffolk	Weesuck Creek and tidal tribs (1701-0111)	Pathogens
<u> </u>		1

Suffolk	West Creek and tidal tribs (1701-0246)	Fecal Coliform
Suffolk	Wooley Pond (1701-0048)	Pathogens
Tompkins	Cayuga Lake, Southern End (0705-0040)	Phosphorus
Tompkins	Cayuga Lake, Southern End (0705-0040)	Silt/Sediment
Warren	Hague Brook and tribs (1006-0006)	Silt/Sediment
Warren	Huddle/Finkle Brooks and tribs (1006-0003)	Silt/Sediment
Warren	Indian Brook and tribs (1006-0002)	Silt/Sediment
Warren	Lake George (1006-0016) and tribs	Silt/Sediment
Warren	Tribs to Lake George, East Shore (1006-0020)	Silt/Sediment
Warren	Tribs to Lake George, Lk.George Village (1006-0008)	Silt/Sediment
Wayne	Lake Ontario Shoreline, Central (0302-0044)	Fecal Coliform
Westchester	Amawalk Reservoir (1302-0044)	Phosphorus
Westchester	Bronx River, Upper, and tribs (1702-0107)	Fecal Coliform
Westchester	Cross River Reservoir (1302-0005)	Phosphorus
Westchester	Hutchinson River, Middle, and tribs (1702-0074)	Fecal Coliform
Westchester	Hutchinson River, Middle, and tribs (1702-0074)	Oil/Grease
Westchester	Lake Katonah (1302-0136)	Phosphorus
Westchester	Lake Lincolndale (1302-0089)	Phosphorus
Westchester	Lake Meahagh (1301-0053)	Phosphorus
Westchester	Lake Mohegan (1301-0149)	Phosphorus
Westchester	Lake Shenorock (1302-0083)	Phosphorus
Westchester	Larchmont Harbor (1702-0116)	Fecal Coliform
Westchester	Long Island Sound, Westchester Co Waters (1702-0001)	Fecal Coliform
Westchester	Long Island Sound, Westchester Co Waters (1702-0001)	Nitrogen
Westchester	Mamaroneck Harbor (1702-0125)	Fecal Coliform
Westchester	Mamaroneck River, Lower (1702-0071)	Silt/Sediment
Westchester	Mamaroneck River, Upp, & minor tribs (1702-0123)	Silt/Sediment
Westchester	Milton Harbor/Lower Blind Brook (1702-0063)	Fecal Coliform
Westchester	Muscoot/Upper New Croton Reservoir (1302-0042)	Phosphorus
Westchester	New Croton Reservoir (1302-0010)	Phosphorus
Westchester	New Rochelle Harbor (1702-0259)	Fecal Coliform
Westchester	Port Chester Harbor/Lower Byram River (1702-0260)	Fecal Coliform

### Appendix C

Westchester	Reservoir No.1/Lake Isle (1702-0075)	Phosphorus
Westchester	Saw Mill River (1301-0007)	Fecal Coliform
Westchester	Saw Mill River (1301-0007)	Phosphorus
Westchester	Saw Mill River, Middle, and tribs (1301-0100)	Fecal Coliform
Westchester	Saw Mill River, Middle, and tribs (1301-0100)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Silt/Sediment
Westchester	Silver Lake (1702-0040)	Phosphorus
Westchester	Teatown Lake (1302-0150)	Phosphorus
Westchester	Titicus Reservoir (1302-0035)	Phosphorus
Westchester	Truesdale Lake (1302-0054)	Phosphorus
Westchester	Wallace Pond (1301-0140)	Phosphorus

### Appendix D. Forms

Included in this section are the following documents, in order:

- Monitoring Locations Inspection and Sampling Field Sheet
- Construction Site Inspection Report Form
- No Exposure Certification
- Municipal Facility Assessment Form
- Storm Event Data Form
- Visual Monitoring Form

### **Monitoring Locations Inspection and Sampling Field Sheet**

### **Section 1: Background Data**

Subwatershed:				Monitoring Locatio	Monitoring Location ID:		
Today's date:				Time (Military):			
Investigators:				Form completed by	<b>/</b> :		
Temperature (°F):		Rai	nfall (in.): Last 24 hou	rs: Last 48 hours:			
Latitude:		Longitude	:	GPS Unit:		GPS LMK	#:
Camera:				Photo #s:			
Land Use in Drainage	Area (Check a	ll that apply):					
☐ Industrial				☐ Open Space			
☐ Ultra-Urban Resider	ntial			☐ Institutional			
☐ Suburban Residentia	al			Other:			
☐ Commercial	Commercial Known Industries:						
Notes (e.g., origin, if kn	own):						
Section 2: Monito	ring Locat	ion Descr	iption				
LOCATION	MATE	RIAL	SH	APE	DIMENSIO	NS (IN.)	SUBMERGED
	□ RCP	☐ CMP	☐ Circular	Single	Diameter/Dime	nsions:	In Water:
☐ Closed Pipe	□ PVC	HDPE	☐ Elliptical	☐ Double			☐ No ☐ Partially ☐ Fully
□ Closed Fipe	☐ Steel		Вох	Triple			With Sediment:
	Other:		☐ Other:	Other:			│ │ │ No │ │ Partially │ │ Fully

Depth: \_\_

Top Width: \_\_\_\_

Bottom Width: \_

Trapezoid

Parabolic

Other: \_

(applicable when collecting samples)

□ No

(If present)	☐ Trickle	☐ Moderate	
--------------	-----------	------------	--

☐ Yes

**Section 3: Quantitative Characterization** 

☐ Concrete

☐ Earthen

☐ Rip-Rap

Other: \_

☐ Open drainage

☐ In-Stream

Flow Present?

Flow Description

FIELD DATA FOR FLOWING MONITORING LOCATIONS					
P	ARAMETER	RESULT	UNIT	EQUIPMENT	
☐ Flow #1	Volume		Liter	Bottle	
☐ Flow #1	Time to fill		Sec		
	Flow depth		In	Tape measure	
☐ Flow #2	Flow width	, ", ——,	Ft, In	Tape measure	
☐ Flow #2	Measured length	, , , , , , , , , , , , , , , , , , , ,	Ft, In	Tape measure	
	Time of travel		S	Stopwatch	
Temperature			°F	Thermometer	
рН			pH Units	Test strip/Probe	
	Ammonia		mg/L	Test strip	

If No, Skip to Section 5

Substantial

### **Monitoring Locations Inspection and Sampling Field Sheet**

### **Section 4: Physical Indicators for Flowing Monitoring Locations Only**

Are Any Physical Indicators Present in the flow?  $\Box$  Yes  $\Box$  No (If No, Skip to Section 5)

INDICATOR	CHECK if Present		DE	SCRIPTION			RELATIVE SEVERITY INDEX (1-3)			
Odor		☐ Sewage ☐ Sulfide	☐ Rancid/s	our 🗌 Petrole	um/gas	ı	☐ 1 - Faint	ı	2 – Easily detected	□ 3 – Noticeable from a distance
Color		☐ Clear ☐ Green	☐ Brown ☐ Orange	☐ Gray ☐ Red	☐ Yellow ☐ Other:	1	1 – Faint colors in sample bottle	' [	2 – Clearly visible in sample bottle	☐ 3 – Clearly visible in flow
Turbidity			Se	ee severity		1	1 – Slight cloudines	ess [	2 - Cloudy	☐ 3 – Opaque
Floatables		☐ Sewage	(Toilet Paper, e	etc.) 🗌 Suds					2 - Some; indications of	3 - Some; origin clear (e.g.,
-Does Not Include Trash!!		☐ Petroleu	m (oil sheen)	Other:			1 – Few/slight; origin not obvious		origin (e.g., possible suds or oil sheen)	obvious oil sheen, suds, or floating sanitary materials)
Section 5: Physical Indicators for Both Flowing and Non-Flowing Monitoring Locations  Are physical indicators that are not related to flow present?   Yes  No (If No, Skip to Section 6)										
INDICATOR	CHECK if F	Present		ı	DESCRIPTION		COMMENTS			ENTS
Monitoring Location Damage			☐ Spalling, C☐ Corrosion	racking or Chip	ping	ling Pai	nt			
Deposits/Stains			Oily	☐ Flow Li	ine 🗌 Pain	nt	☐ Other:			
Abnormal Vegetation			Excessive	☐ Inhibite	ed .					
De an me al muelita			Odors	Colors	☐ Floa	tables	☐ Oil Sheen			
Poor pool quality			Suds	☐ Excess	sive Algae		Other:			
Pipe benthic growth			Brown	☐ Orange	☐ Gree	en	Other:			
Section 6: Overall I	Monitoring Loc	ation Char	acterization							
☐ Unlikely ☐										
Section 7: Data Col	llection									
1. Sample for the lab?			☐ Yes ☐	] No						
2. If yes, collected from	n:		☐ Flow ☐	] Pool						
3. Intermittent flow trap	set?		Yes	] No	If Y	es, typ	e: OBM [	Caulk	dam dam	

Section 8: Any Non-Illicit Discharge Concerns (e.g., trash or needed infrastructure repairs)?



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF WATER



GP-0-20-001: IV.C.5

NEW YORK STATE Environmental Conservation		
New York State Department of Environi		
Construction Site Inspection Report for SPDES M	S4 General Permit	GP-0-24-001
Project Name:	Date:	
·		
Project Location:	Weather:	
Permit # (if any): NYR Contacted: □Yes □No	Entry Time:	Exit Time:
Name of SPDES Permittee:	Inspection Type:	□NOT □ Complaint
Phone Number(s):		□ Compliance □ Referral
On-site Representative(s) and Company(s):	MS4 Operator Na	me:
	'	
	MS4 Permit ID: N	YR20A
SPDES Authority		
Yes No N/A		Citation
. $\square$ $\square$ Does the project have permit coverage?		GP-0-20-001: I.A & II. B
. $\ \square \ \square \ \square$ Is a copy of the NOI and Acknowledgment Letter available on site and access	ssible for viewing?	GP-0-20-001: II.D.2
. $\ \square \ \square \ \square$ Is a copy of the MS4 SWPPP Acceptance Form available on site and access	sible for viewing?	GP-0-20-001: II.D.2
. $\ \square \ \square \ \square$ Is an up-to-date copy of the signed SWPPP retained at the construction site	?	GP-0-20-001: II.D.2. & III.A.4
5. □ □ □ Is a copy of the SPDES General Permit retained at the construction site?		GP-0-20-001: II.D.2
6. □ □ □ Does the NOI accurately report the number of acres to be disturbed?		GP-0-20-001: II.B.4
SWPPP Content		
Yes No N/A		Citation
7. □ □ □ Does the SWPPP describe and identify the erosion and sediment control me		
8.   Does the SWPPP provide an inspection schedule and maintenance required and maintenance requ		
0. $\square$ $\square$ Does the SWPPP describe and identify the stormwater management practice.	, ,	GP-0-20-001: III.B.2
0. □ □ □ Does the SWPPP identify the contractor(s) and subcontractor(s) responsible		GP-0-20-001: III.A.6
1.   Does the SWPPP identify at least one trained individual from each contractor.  Contractor Contractor Contractor.	` ,	,
2.   Does the SWPPP include all the necessary Contractor Certification Statements of the CMDDD signal by the promittee?	ents and signatures?	GP-0-20-001: III.A.6
3.   Is the SWPPP signed by the permittee?	muster management re-	GP-0-20-001: VII.H.2
<ul> <li>4. □ □ □ Is the SWPPP prepared by a qualified professional (if post-construction stor</li> <li>5. □ □ □ Do the SMPs conform to the Enhanced Phosphorus Removal Standards (professional)</li> </ul>	_	
I5. □ □ □ Do the SMPs conform to the Enhanced Phosphorus Removal Standards (precordkeeping	OJOGIS III TIVIDE WALEISIK	eds)? GP-0-20-001: III.B.3
Yes No N/A		Citation
16. □ □ □ Are self-inspections performed as required by the permit (weekly, or twice weekly).	eekly for >5 acres distur	
7. □ □ Are the self-inspections performed and signed by a qualified inspector and r	etained on site?	GP-0-20-001:II.C.2.,IV.C.6 & VII.H
<ol> <li>□ □ □ Do the qualified inspector's reports include the minimum reporting requirements.</li> </ol>	ents?	GP-0-20-001: IV.C.4

19.  $\square$   $\square$  Do inspection reports identify corrective measures that have not been implemented or are recurring?



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF WATER



### Visual Observations

Yes No N/A	Citation
20. □ □ □ Are all erosion and sediment control measures installed properly?	GP-0-20-001: VII.L
21. □ □ □ Are all erosion and sediment control measures being maintained properly?	GP-0-20-001: IV.A.1
22. $\square$ $\square$ Was written authorization issued for any disturbance greater than 5 acres?	GP-0-20-001: II.D.3
23. $\square$ $\square$ Have stabilization measures been implemented in inactive areas per Permit (>5acres) or ESC Standard?	GP-0-20-001: II.D.3.b & III.B.1.f
24. $\square$ $\square$ Are post-construction stormwater management practices constructed/installed correctly?	GP-0-20-001: III.B.2
25. $\square$ $\square$ Has final site stabilization been achieved and temporary E&SC measures removed prior to NOT submittal?	GP-0-20-001: V.A.2
26. □ □ □ Was there a discharge from the site on the day of inspection?	
27. $\square$ $\square$ Is there evidence that a discharge caused or contributed to a violation of water quality standards?	ECL 17-0501, 6 NYCRR 703.2 &
	GP-0-20-001: I.D

### **Water Quality Observations**

Describe t	he disc	harge(s):	location,	source(s	s), impact	on receiving	water(s)	, etc.
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Describe the quality of the receiving water(s) both upstream and downstream of the discharge:

Describe any other water quality standards or permit violations:



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF WATER



Additional Comments:	
□ Dhetegraphe etteched	
☐ Photographs attached	
Overall Inspection Rating:   Satisfactory   Marginal	Unsatisfactory
Name/Agency of Lead Inspector:	Signature of Lead Inspector:
Names/Agencies of Other Inspectors:	

### **NO EXPOSURE CERTIFICATION**



# For High Priority Municipal Facilities in SPDES MS4 General Permit, GP-0-24-001

The completed No Exposure Certification must be documented in the SWMP Plan. *Please do not submit this form to the Department unless requested.* 

I. Ow	I. Owner/Facility Information											
Owner/Operator Name:												
Mailing Address: City/State/Zip:												
Conta	ct Name:			Phone No.:								
Facilit	y Name:											
Street	Address:		City/State/Zip:									
Count	y:	Latitude:		Longitude:								
II. Ex	posure Checklist											
		tivities exposed to precipitation, now c swer "Yes" to any of these questions		ole future? (Please check either "Yes" or you are not eligible for no exposure.	YES	NO						
1	Using, storing or cleaning mach equipment remain and are exp	ninery or equipment, and areas where posed to stormwater	residuals from us	sing, storing or cleaning machinery or								
2	Materials or residuals on the gr	ound or in stormwater inlets from spill	s/leaks									
4	4 Material handling equipment (except adequately maintained vehicles)											
5	Materials or products during loa	ading/unloading or transporting activiti	ies									
6	Materials or products stored ou stormwater does not result in t	tdoors (except final products intended he discharge of pollutants)	d for outside use [6	e.g., new cars] where exposure to								
7	Materials contained in open, de	eteriorated or leaking storage drums, b	parrels, tanks, and	l similar containers								
8	Materials or products handled/s	stored on roads or railways owned or r	maintained by the	discharger								
9	Waste material (except waste in	n covered, non-leaking containers [e.	g., dumpster])									
III. Ce	ertification											
exclus indust under munic permit	I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from SPDES stormwater permitting. I certify under penalty of law that there are no discharges of storm water contaminated by exposure to industrial activities or materialsfrom the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)). I understand that I am obligated to submit a no exposure certification form upon request to the NPDES permitting authority or to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the SPDES permitting authority, or MS4 Operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request.											
Printe	d Name:			Title/Position:								
Signa	ture:			Date:								



### Municipal Facility Assessment Form For SPDES MS4 General Permit, GP-0-24-001

Assessments must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and evaluate the effectiveness of best management practices required by the SPDES MS4 General Permit (GP-0-24-001).

MS4	Permit ID:	MS4 Operator Name:			
Facili	lity Name: Facility Type: Date:				
Weather Conditions:					
ls sto	rmwater runoff present during this assessment? ☐ Yes ☐ No				
Comm	ents:				
<u>Gen</u>	<u>eral</u>			Yes	No
1	Is this a high priority municipal facility?				
2	If this is a high priority municipal facility, does the facility qualify for	a No Exposure Certification?			
3	If this is a high priority municipal facility, is there a completed SWP	PP available?			
4	Does the facility have any MS4 outfalls?				
5	Does the facility have any interconnections?				
6	Does the facility have any municipal facility intraconnections?				
Comm	ents:		•		
Goo	d Housekeeping			Yes	No
7	Are paved surfaces free of trash, sediment, and/or debris?				
8	Date the paved area was last swept or vacuumed.				
9	Do outdoor waste receptacles have covers?				
10	Are the waste receptacles emptied on a regular basis?				
11	Are there signs of leaks, contaminants or overfilling at the waste re	ceptacle area?			
12	Are the following facility areas free of accumulated trash, sediment	, debris, contaminants, and spills:			
	- Salt storage areas				
	- Container storage areas				
	- Maintenance areas				

	- Staging areas			
Comm	ents:			
Vehi	icle and Equipment Areas	□ <u>N/A</u>	Yes	No
13	Are vehicle/equipment parked indoors or under a roof?			
14 Are vehicles/equipment washed in only designated areas?				
15	Are vehicles washed regularly to remove contamination and prevent them from polluting stormwater?			
16	Is all wash water treated in an oil water separator prior to discharge?			
17	Is all wash water managed so it does not enter the MS4?			
Comme	ents			
Vehi	icle/Equipment Maintenance	□ <u>N/A</u>	Yes	No
18	Is equipment stored under shelter or elevated and covered?			
19 Are fluids drained over a drip pan or pad?				
20	O Are funnels or pumps used when transferring fluids?			
21	Are waste rags and used absorbent pads disposed of properly?			
22	Are any vehicles and/or equipment leaking fluids?			
23	23 Are drip pans immediately placed under leaks?			
24	Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)?			
25	Are vehicles inspected daily for leaks?			
Comm	ents:			
Fuel	ling areas	□ <u>N/A</u>	Yes	No
26	Is fueling performed under a canopy or roof?			
27	27 Are spill cleanup materials available at the fueling area?			
28	Are breakaway valves used on fueling hoses?			
29	9 Is the fueling handle lock disconnected so the operator must attend the fueling?			
30	Is stormwater runoff from fueling area treated in an oil/water separator?			
31	Is the fueling automatic stop inspected regularly to ensure it is working properly?			
32	Are all fuel deliveries monitored?			
Comm	ents:			

Salt	Storage Piles or Pile Containing Salt	□ <u>N/A</u>	Yes	No
33	Is salt stored in a salt storage building or under a roof?			
34	Are controls in place to minimize spills while adding or removing material from the pile?			
35	Are salt spills cleaned up promptly?			
36	Is overflow and tracked salt removed promptly from loading areas?			
37	Is stormwater draining away from the salt pile directed to a vegetated filter area			
Comm	ents:			
Fluid	ds Management	□ <u>N/A</u>	Yes	No
38	Are all drums and containers of fluids stored with proper cover and containment?			
39	Are fluids stored in appropriate containers and/or storage cabinets?			
40	40 Are all fluids kept in original containers or labeled in a manner that describes the contents adequately?			
41 Are Material Safety Data Sheets (MSDS/SDS) readily available?				
42	Are all containers that are stored free of leaks or deposits?			
43	3 Are containers of product inspected regularly?			
44	44 Is used oil and antifreeze stored indoors and/or on spill containment pallets?			
45	Is used oil and antifreeze properly disposed of or recycled?			
Comm	ents:			
	A stid Patterios		Yes	No
Lead	d Acid Batteries	□ <u>N/A</u>		
46	Are lead-acid batteries stored indoors on spill containment pallets or in bins?			
47	Are intact batteries stored on an acid-resistant rack or tub?			
48	Are cracked or leaking batteries stored in labeled, closed, leak-proof containers?			
49	Is the date each battery was placed in storage recorded?			
50	Are batteries stacked more than 5 high?			
51	Are batteries inspected regularly for leaks?			
Comn	nents:			
Snill	Prevention and Response Procedures	□ N/A	Yes	No
		<u>.w.</u>		
52	Are vehicles inspected daily for leaks?		Ш	]

53	Is spill control equipment and absorbents readily available?			
54	4 Are emergency phone numbers posted in conspicuous areas?			
Are spills contained and cleaned up immediately?				
Comm	nents:			
Gen	neral Material Storage Areas	□ <u>N/A</u>	Yes	No
56	Are leaking or damaged materials stored inside a building or another type of storm resistance shelter?			
57	Are all material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material stockpiles within containment structures (e.g., concrete barriers, earthen berms) or stored in a material structure (e.g., concrete barriers).	anner that		
58	Are used fuel tanks and other scrap metal and parts drained of fluids and stored under cover?			
59	Are outdoor containers covered?			
60	Are piles of spoils, asphalt, debris, etc. stored under a roof or cover?			
61	Are spills of material or debris cleaned up promptly?			
62	Are used tire storage piles placed away from storm drains or conveyances?			
63 Are tires recycled frequently to keep the number of stored tires manageable?				
Comr	ments:			
Stor	mwater Management		Yes	No
<b>Stor</b> 64	Are employees trained on the municipal facility procedures?		Yes	No 🗆
64	Are employees trained on the municipal facility procedures?			
64 66	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?	ending on		
64 66 67	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depe	ending on		
64 66 67 68	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depet the MS4 Operator type. Based on this, do any catch basins need to be cleaned?	ending on		
64 66 67 68	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depet the MS4 Operator type. Based on this, do any catch basins need to be cleaned?  Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?  Are rooftop drains directed to areas away from pavement?	ending on		
64 66 67 68 69 70	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depet the MS4 Operator type. Based on this, do any catch basins need to be cleaned?  Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?  Are rooftop drains directed to areas away from pavement?	ending on		
64 66 67 68 69 70	Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depet the MS4 Operator type. Based on this, do any catch basins need to be cleaned?  Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?  Are rooftop drains directed to areas away from pavement?			
64 66 67 68 69 70 Comm	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depet the MS4 Operator type. Based on this, do any catch basins need to be cleaned?  Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?  Are rooftop drains directed to areas away from pavement?  ents:  Sion and Sediment Controls  Are soil stabilization measures (e.g., seed and mulch, rolled erosion control products) considered in areas that he			
64 66 67 68 69 70 Comm	Are employees trained on the municipal facility procedures?  Are BMPs and treatment structures working as designed?  Are BMPs and treatment structures free from debris buildup or overgrown vegetation that may impair function?  Catch basins should be cleaned in accordance with the timeframes listed in Part VI.F.3.c.iii. / Part VII.F.3.c.iii, depet the MS4 Operator type. Based on this, do any catch basins need to be cleaned?  Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?  Are rooftop drains directed to areas away from pavement?  In the soil stabilization measures (e.g., seed and mulch, rolled erosion control products) considered in areas that it potential for significant soil erosion?	nave the		

Comments:			
Corrective Actions	and Comment		
Describe Inspection find	dings and if necessary, the corrective actions taken		
Inspector Signature		Date:	



Date

### Storm Event Data Form for SPDES MS4 General Permit, GP-0-24-001

Do not submit this form to the Department; keep this form with the municipal facility's SWPPP and in the MS4 Operator's SWMP Plan.  Permit Number:    N				Conservation			١.	GP-0-24-001												
N Y R 2 0 A	Do not sul	bmit t	his fo	rm t	o the	Dep	oartr	ment	t; ke	ep this	form w	ith the	e municipal fa	acility'	s SWPPP and in the I	MS4 Operatoi	's SWMP	Plan.		
Contact First Name:  Contact Erist Name:  Contact Exist Name:  Contact Email:  Contact Email:  Storm Event Date:  Storm Duration (in hours):  Date of Last Measurable Storm Event (in inches):  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the Information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I arm aware that here are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Permit Number:																			
Contact Erist Name:  Contact Email:  Contact Email:  Contact Email:  Storm Event Date:  Storm Event Date:  Storm Event Date:  Contact Email:  Duration (in hours):  Date of Last Measurable Storm Event:  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information, the information, including the possibility of fine and impresonment for knowing violations.	N Y	R	2	0	Α															
Contact Enail:  Contact Email:  Storm Event Date:  Storm Duration (in hours):  Rainfall Measurement from Storm Event (in inches):  Date of Last Measurable Storm Event (in inches):  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penally of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Facility Na	ame:																		
Contact Enail:  Contact Email:  Storm Event Date:  Storm Duration (in hours):  Rainfall Measurement from Storm Event (in inches):  Date of Last Measurable Storm Event:  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penally of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.																				
Contact Phone:  Storm Event Date:  Storm Duration (in hours):  Rainfall Measurement from Storm Event (in inches):  Date of Last Measurable Storm Event:  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Contact F	irst N	ame:																	
Contact Phone:  Storm Event Date:  Storm Duration (in hours):  Rainfall Measurement from Storm Event (in inches):  Date of Last Measurable Storm Event:  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.																				
Contact Email:  Storm Event Date:  Storm Duration (in hours):  Rainfall Measurement from Storm Event (in inches):  Date of Last Measurable Storm Event:  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and bellef, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Contact L	ast N	ame:		j															
Storm Event Date:  Storm Duration (in hours):  Cartification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and bellef, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Contact P	hone																		
Storm Duration (in hours):  Rainfall Measurement from Storm Event (in inches):  Date of Last Measurable Storm Event:  Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Contact E	mail:																		
Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Storm Eve	ent Da	ate:																	
Duration Between Storm Event Sampled and End of Previous Measurable Storm (in hours):  Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Storm Dui	ration	(in h	ours	:):															
Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Rainfall M	easu	reme	nt fro	om S	torm	Eve	ent (	in in	ches):										
Certification  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Date of La	ast Me	easur	able	Stor	m Ev	vent	t:												
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Duration E	Betwe	en S	torm	Eve	nt Sa	amp	oled a	and	End of	f Previou	us Me	easurable Sto	orm (ir	n hours):					
		l ce sys per is, t info	rtify item of son of the rmat	unde lesig or pe bes ion, i	er per gned t rsons t of n includ	nalty to as s who ny kr ding t	sure o m now the	e tha anaç ledg poss	at qu ge th e ar sibili	alified ne syst nd belie ty of fir	personr tem, or t ef, true,	nel pr those accui	operly gathe persons dire rate, and cor	r and e ectly re mplete	evaluate the information esponsible for gathering a lam aware that there g violations.	on submitted. ng the informa re are significa	Based on ation, the i ant penalti	my inqui information	iry of the	e nitted

Signature



## Visual Monitoring Form MS4 GP-0-24-001

All high priority municipal facilities covered under the MS4 GP-0-24-001 must perform Visual Monitoring twice a permit term, separated by a minimum of one (1) year. Please see the permit Part VI.F/VII.F for additional requirements. This form is part of the facilities records and should be retained onsite with the facility's Stormwater Pollution Prevention Plan. *Please do not submit this form to the Department*.

1	MS4 Operator Permit ID Facility	y Name		
	Outfall Number Examiner's I	Name	Examiner's Title	
	Reporting Year Rainfa	all Amount	Qualifying Storm? OYes ONo	Runoff Source? ORainfall OSnowmelt
	Date/Time Collected	AM / PM	Date/Time Examined	AM / PN
	Does the stormwater appear to be co     If yes, describe	lored?		OYes ONo
	2. Is the stormwater clear or transpare	nt?		OYes ONo
	If yes, which of the following best des	cribes the clarity of the stormwater	:Clear	OMilky Opaque
	3. Can you see a rainbow sheen effect	on the water surface?		Yes ONo
	If yes, which best describes the sheen?	·	Rainbow Sheen	Floating Oil Globules
	4 Does the sample have an odor?			Oves ONo

If yes, describe		
5. Is there something floating on the surface of the sample?	OYes	ON <sub>o</sub>
If yes, describe	01.55	0
n yes, describe		
6. Is there something suspended in the water column of the sample?	<b>Y</b> es	ONo
If yes, describe		•
7. Is there something settled on the bottom of the sample?	OYes	$\bigcirc$ No
If yes, describe		•
8. Is there foam or material forming on the top of the sample surface?	OYes	s <b>O</b> No
If yes, describe		
Detail any concerns, corrective actions taken and any other indicators of pollution present in the sample:		

### **Works Cited**

Center for Watershed Protection, Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assistance, October 2004 (CWP 2004)

New York State Department of Environmental Conservation, Maintenance Guidance: Stormwater Management Practices, March 31, 2017 (NYS DEC Maintenance Guidance 2017)

New York State Department of Environmental Conservation, Model Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems, April 2006 (NYS DEC Model IDDE Local Law 2006)

New York State Department of Environmental Conservation, Sample Local Law for Stormwater Management and Erosion & Sediment Control, March 2006 (NYS DEC Sample SM and E&SC Local Law 2006)

New York State, Standards and Specifications for Erosion & Sediment Control, November 2016 (NYS E&SC 2016)

New York State, Stormwater Management Design Manual, January 2015 (NYS SWMDM 2015)

SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, GP-0-23-001 (MSGP)

SPDES General Permit for Stormwater from Construction Activities, GP-0-20-001 (CGP)

SPDES General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems, GP-0-24-001 (MS4 GP)

United States Department of Transportation Federal Highway Administration, Highway Functional Classification Concepts, Criteria and Procedures, 2013 (USDOT 2013)

### **APPENDIX 3**

Village Code - Local Law for Stormwater Management and Erosion and Sediment Control

### Part 2 Stormwater Management, Erosion And Sediment Control [Adopted 3-4-2008 By L.L. No. 3-2008<sup>1</sup>]

### ARTICLE III General Provisions

#### § 143-20. Findings of fact.

It is hereby determined that:

- A. Land development activities and associated increases in site impervious cover often alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, or sediment transport and deposition;
- B. This stormwater runoff contributes to increased quantities of waterborne pollutants, including siltation of aquatic habitat for fish and other desirable species;
- C. Clearing and grading during construction tends to increase soil erosion and add to the loss of native vegetation necessary for terrestrial and aquatic habitat;
- D. Improper design and construction of stormwater management practices can increase the velocity of stormwater runoff thereby increasing stream bank erosion and sedimentation;
- E. Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow;
- F. Substantial economic losses can result from these adverse impacts on the waters of the municipality;
- G. Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities;
- H. The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.
- I. Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of erosion and sedimentation from development.

#### § 143-21. Purpose.

The purpose of this Part 2 is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction and to address the findings of fact in § 143-20 hereof. This Part 2 seeks to

<sup>1.</sup> Editor's Note: The Provisions Of This Local Law Were Originally Adopted As Ch. 143A Of The Code, But Were Redesignated To Fit Into The Organizational Structure Of The Code.

meet those purposes by achieving the following objectives:

- A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, or as amended or revised;
- B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01, or as amended or revised;
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
- D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

### § 143-22. Statutory authority.

In accordance with § 10 of the Municipal Home Rule Law of the State of New York, the Board of Trustees of the Village of Islandia has the authority to enact local laws and amend local laws for the purpose of promoting the health, safety or general welfare of the residents of the Village of Islandia and for the protection and enhancement of its physical environment. The Board of Trustees of the Village of Islandia may include in any such local law provisions for the appointment of any municipal officer, employees, or independent contractor to effectuate, administer and enforce such local law.

### § 143-23. Definitions.

As used in this Part 2, the following terms shall have the meanings indicated:

AGRICULTURAL ACTIVITY — The activity of an active farm including grazing and watering livestock, irrigating crops, harvesting crops, using land for growing agricultural products, and cutting timber for sale, but shall not include the operation of a dude ranch or similar operation, or the construction of new structures associated with agricultural activities.

APPLICANT — A property owner or agent of a property owner who has filed an application for a land development activity.

BUILDING — Any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than 100 square feet of area.

CHANNEL — A natural or artificial watercourse with a definite bed and banks that conducts

continuously or periodically flowing water.

CLEARING — Any activity that removes the vegetative surface cover.

DEDICATION — The deliberate appropriation of property by its owner for general public use.

DEPARTMENT — The New York State Department of Environmental Conservation.

DESIGN MANUAL — The New York State Stormwater Management Design Manual, most recent version including applicable updates, which serves as the official guide for stormwater management principles, methods and practices.

DEVELOPER — A person who undertakes land development activities.

EROSION CONTROL MANUAL — The most recent version of the "New York Standards and Specifications for Erosion and Sediment Control" Manual, commonly known as the "Blue Book."

GRADING — Excavation or fill of material, including the resulting conditions thereof.

IMPERVIOUS COVER — Those surfaces, improvements and structures that cannot effectively infiltrate rainfall, snowmelt and water (e.g., building rooftops, pavement, sidewalks, driveways, etc).

INDUSTRIAL STORMWATER PERMIT — A state pollutant discharge elimination system permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

INFILTRATION — The process of percolating stormwater into the subsoil.

JURISDICTIONAL WETLAND — An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

LAND DEVELOPMENT ACTIVITY — Construction activity including clearing, grading, excavating, soil disturbance or placement of fill that results in land disturbance of equal to or greater than one acre, or activities disturbing less than one acre of total land area that is part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules.

LANDOWNER — The legal or beneficial owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

MAINTENANCE AGREEMENT — A legally recorded document that acts as a property deed restriction, and which provides for long-term maintenance of stormwater management practices.

NONPOINT SOURCE POLLUTION — Pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

PHASING — Clearing a parcel of land in distinct pieces or parts, with the stabilization of each piece completed before the clearing of the next.

POLLUTANT OF CONCERN — Sediment or a water quality measurement that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the

land development activity.

PROJECT — Land development activity.

RECHARGE — The replenishment of underground water reserves.

SEDIMENT CONTROL — Measures that prevent eroded sediment from leaving the site.

SENSITIVE AREAS — Cold water fisheries, shellfish beds, swimming beaches, groundwater recharge areas, water supply reservoirs, habitats for threatened, endangered or special concern species.

SPDES GENERAL PERMIT FOR CONSTRUCTION ACTIVITIES GP-02-01 — A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM MUNICIPAL SEPARATE STORMWATER SEWER SYSTEMS GP-02-02 — A permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA-established water quality standards and/or to specify stormwater control standards.

STABILIZATION — The use of practices that prevent exposed soil from eroding.

STOP-WORK ORDER — An order issued which requires that all construction activity on a site be stopped.

STORMWATER — Rainwater, surface runoff, snowmelt and drainage.

STORMWATER HOTSPOT — A land use or activity that generates higher concentrations of hydrocarbons, trace metals or toxicants than are found in typical stormwater runoff, based on monitoring studies.

STORMWATER MANAGEMENT — The use of structural or nonstructural practices that are designed to reduce stormwater runoff and mitigate its adverse impacts on property, natural resources and the environment.

STORMWATER MANAGEMENT FACILITY — One or a series of stormwater management practices installed, stabilized and operating for the purpose of controlling stormwater runoff.

STORMWATER MANAGEMENT OFFICER (SMO) — An employee or officer designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

STORMWATER MANAGEMENT PRACTICES (SMPS) — Measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing flood damage and preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and and water bodies.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) — A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

STORMWATER RUNOFF — Flow on the surface of the ground, resulting from precipitation.

#### SURFACE WATERS OF THE STATE OF NEW YORK —

- A. Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial seas of the State of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.
- B. Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to man-made bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

WATERCOURSE — A permanent or intermittent stream or other body of water, either natural or manmade, which gathers or carries surface water.

WATERWAY — A channel that directs surface runoff to a watercourse or to the public storm drain.

### § 143-24. Applicability.

- A. This Part 2 shall be applicable to all land development activities as defined in this Part 2, § 143-23.
- B. The municipality shall designate a Stormwater Management Officer (SMO) who shall accept and review all stormwater pollution prevention plans and forward such plans to the applicable municipal board. The SMO may:
  - (1) Review the plans;
  - (2) Upon approval by the Board of Trustees of the Village of Islandia, engage the services of a registered professional engineer to review the plans, specifications and related documents at a cost not to exceed a fee schedule established by said governing board; or
  - (3) Accept the certification of a licensed professional that the plans conform to the requirements of this Part 2.
- C. All land development activities subject to review and approval by the Planning Board of the Village of Islandia under subdivision and/or site plan regulations shall be reviewed subject to the standards contained in this Part 2.
- D. All land development activities not subject to review as stated in Subsection C shall be required to submit a Stormwater Pollution Prevention Plan (SWPPP) to the SMO who shall approve the SWPPP if it complies with the requirements of this Part 2.

### **§ 143-25.** Exemptions.

The following activities may be exempt from review under this Part 2.

- A. Agricultural activity as defined in this Part 2.
- B. Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility.
- C. Repairs to any stormwater management practice or facility deemed necessary by the SMO.
- D. Any part of a subdivision if a plat for the subdivision has been approved by the Village on or before the effective date of this Part 2.
- E. Land development activities for which a building permit has been approved on or before the effective date of this Part 2.
- F. Installation of fence, sign, telephone, and electric poles and other kinds of posts or poles.
- G. Emergency activity immediately necessary to protect life, property or natural resources.
- H. Activities of an individual engaging in home gardening by growing flowers, vegetable and other plants primarily for use by that person and his or her family.
- I. Landscaping and horticultural activities in connection with an existing structure.

### ARTICLE IV Stormwater Pollution Prevention Plans

### § 143-26. Stormwater pollution prevention plan requirement.

No application for approval of a land development activity shall be reviewed until the appropriate board has received a stormwater pollution prevention plan (SWPPP) prepared in accordance with the specifications in this Part 2.

### § 143-27. Contents of stormwater pollution prevention plans.

- A. All SWPPs shall provide the following background information and erosion and sediment controls:
  - (1) Background information about the scope of the project, including location, type and size of project.
  - (2) Site map/construction drawing(s) for the project shall be at a scale no smaller than one inch equals 100 feet and include a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); wetlands and drainage patterns that could be affected by the construction activity; existing and final slopes; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of the stormwater discharges(s);
  - (3) Description of the soil(s) present at the site;
  - (4) Construction phasing plan describing the intended sequence of construction activities, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance. Consistent with the New York Standards and Specifications for Erosion and Sediment Control (Erosion Control Manual), not more than five acres shall be disturbed at any one time unless pursuant to an approved SWPPP.
  - (5) Description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in stormwater runoff;
  - (6) Description of construction and waste materials expected to be stored on site with updates as appropriate, and a description of controls to reduce pollutants from these materials, including storage practices to minimize exposure of the materials to stormwater, and spill prevention.
  - (7) Temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out;
  - (8) A site map/construction drawing(s) specifying the location(s), size(s) and length(s) of each erosion and sediment control practice;

(9) Dimensions, material specifications and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins;

- (10) Temporary practices that will be converted to permanent control measures;
- (11) Implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and duration that each practice should remain in place;
- (12) Maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practice;
- (13) Name(s) of the receiving water(s);
- (14) Delineation of SWPPP implementation responsibilities for each part of the site;
- (15) Description of structural practices designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable; and
- (16) Any existing data that describes the stormwater runoff at the site.
- B. Land development activities as defined in § 143-23 of this Part 2 and meeting Condition A, B or C below shall also include water quantity and water quality controls (post-construction stormwater runoff controls) as set forth in § 143-27C below as applicable:
  - (1) Condition A. Stormwater runoff from land development activities discharging a pollutant of concern to either an impaired water identified on the Department's 303(d) list of impaired waters or a total maximum daily load (TMDL) designated watershed for which pollutants in stormwater have been identified as a source of the impairment.
  - (2) Condition B. Stormwater runoff from land development activities disturbing five or more acres.
  - (3) Condition C. Stormwater runoff from land development activity disturbing between one and five acres of land during the course of the project, exclusive of the construction of single-family residences and construction activities at agricultural properties.
- C. SWPPP Requirements for above Conditions A, B and C:
  - (1) All information in § 143-27A of this Part 2.
  - (2) Description of each post-construction stormwater management practice;
  - (3) Site map/construction drawing(s) showing the specific location(s) and size(s) of each post-construction stormwater management practice;
  - (4) Hydrologic and hydraulic analysis for all structural components of the stormwater management system for the applicable design storms;
  - (5) Comparison of post-development stormwater runoff conditions with predevelopment conditions;

(6) Dimensions, material specifications and installation details for each post-construction stormwater management practice;

- (7) Maintenance schedule to ensure continuous and effective operation of each postconstruction stormwater management practice.
- (8) Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
- (9) Inspection and maintenance agreement binding on all subsequent landowners served by the onsite stormwater management measures in accordance with Article VI of this Part 2
- (10) For Condition A, the SWPPP shall be prepared by a landscape architect, certified professional or professional engineer and must be signed by the professional preparing the plan, who shall certify that the design of all stormwater management practices meets the requirements in this Part 2.

### § 143-28. Other environmental permits.

The applicant shall assure that all other applicable environmental permits have been or will be acquired for the land development activity prior to approval of the final stormwater design plan.

### § 143-29. Contractor certification.

- A. Each contractor and subcontractor identified in the SWPPP who will be involved in soil disturbance and/or stormwater management practice installation shall sign and date a copy of the following certification statement before undertaking any land development activity: "I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan. I also understand that it is unlawful for any person to cause or contribute to a violation of water quality standards."
- B. The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
- C. The certification statement(s) shall become part of the SWPPP for the land development activity.

### § 143-30. SWPPP availability.

A copy of the SWPPP shall be retained at the site of the land development activity during construction from the date of initiation of construction activities to the date of final stabilization.

#### ARTICLE V

### Performance and Design Criteria for Stormwater Management and Erosion and Sediment Control

All land development activities shall be subject to the following performance and design criteria:

### § 143-31. Technical standards.

For the purpose of this Part 2, the following documents shall serve as the official guides and specifications for stormwater management. Stormwater management practices that are designed and constructed in accordance with these technical documents shall be presumed to meet the standards imposed by this Part 2:

- A. The New York State Stormwater Management Design Manual (New York State Department of Environmental Conservation, most current version or its successor, hereafter referred to as the Design Manual).
- B. New York Standards and Specifications for Erosion and Sediment Control, (Empire State Chapter of the Soil and Water Conservation Society, 2004, most current version or its successor, hereafter referred to as the Erosion Control Manual).

### § 143-32. Equivalence to technical standards.

Where stormwater management practices are not in accordance with technical standards, the applicant or developer must demonstrate equivalence to the technical standards set forth in § 143-31, and the SWPPP shall be prepared by a licensed professional.

#### § 143-33. Water quality standards.

Any land development activity shall not cause an increase in turbidity that will result in substantial visible contrast to natural conditions in surface waters of the State of New York.

#### ARTICLE VI

### Maintenance, Inspection and Repair of Stormwater Facilities

### § 143-34. Maintenance and inspection during construction.

- A. The applicant or developer of the land development activity or its representative shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this Part 2. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by 50%.
- B. For land development activities as defined in § 143-23 and meeting Condition A, B or C in § 143-27B, the applicant shall have a qualified professional conduct site inspections and document the effectiveness of all erosion and sediment control practices every seven days and within 24 hours of any storm event producing 0.5 inch of precipitation or more. Inspection reports shall be maintained in a site log book.

### § 143-35. Maintenance easement(s).

Prior to the issuance of any approval that has a stormwater management facility as one of the requirements, the applicant or developer must execute a maintenance easement agreement that shall be binding on all subsequent landowners served by the stormwater management facility. The easement shall provide for access to the facility at reasonable times for periodic inspection by the Village of Islandia to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this Part 2. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the Village of Islandia.

### § 143-36. Maintenance after construction.

The owner or operator of permanent stormwater management practices installed in accordance with this Part 2 shall ensure they are operated and maintained to achieve the goals of this Part 2. Proper operation and maintenance also includes as a minimum, the following:

- A. A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this Part 2.
- B. Written procedures for operation and maintenance and training new maintenance personnel.
- C. Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with § 143-33.

### § 143-37. Maintenance agreements.

The Village of Islandia shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions this Part 2. The Village of Islandia,

in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this Part 2 and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

### ARTICLE VII Administration and Enforcement

### § 143-38. Construction inspection.

- A. Erosion and sediment control inspection.
  - (1) The Village of Islandia Stormwater Management Officer (SMO) may require such inspections as necessary to determine compliance with this Part 2 and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this Part 2 and the stormwater pollution prevention plan (SWPPP) as approved. To obtain inspections, the applicant shall notify the Village of Islandia enforcement official at least 48 hours before any of the following as required by the SMO:
    - (a) Start of construction.
    - (b) Installation of sediment and erosion control measures.
    - (c) Completion of site clearing.
    - (d) Completion of rough grading.
    - (e) Completion of final grading.
    - (f) Close of the construction season.
    - (g) Completion of final landscaping.
    - (h) Successful establishment of landscaping in public areas.
  - (2) If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the SMO.
- B. Stormwater management practice inspections. The Village of Islandia SMO is responsible for conducting inspections of stormwater management practices (SMPs). All applicants are required to submit "as-built" plans for any SMPs located on-site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer.
- C. Inspection of stormwater facilities after project completion. Inspection programs shall be established on any reasonable basis, including but not limited to, routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher-than-usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but

- are not limited to, reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other SMPs.
- D. Submission of reports. The Village of Islandia SMO may require monitoring and reporting from entities subject to this Part 2 as are necessary to determine compliance with this Part 2.
- E. Right-of-entry for inspection. When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public storm water system, the landowner shall grant to the Village of Islandia the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in § 143-38C.

### § 143-39. Performance guarantee.

- A. Construction completion guarantee. In order to ensure the full and faithful completion of all land development activities related to compliance with all conditions set forth by the Village of Islandia in its approval of the SWPPP, the Village of Islandia may require the applicant or developer to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit from an appropriate financial or surety institution which guarantees satisfactory completion of the project and names the Village of Islandia as the beneficiary. The security shall be in an amount to be determined by the Village of Islandia based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the Village of Islandia, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facility(ies) have been constructed in accordance with the approved plans and specifications and that a one-year inspection has been conducted and the facilities have been found to be acceptable to the Village of Islandia. Per-annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.
- B. Maintenance guarantee. Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the Village of Islandia with an irrevocable letter of credit from an approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion and sediment control facilities, the Village of Islandia may draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.
- C. Recordkeeping. The Village of Islandia may require entities subject to this Part 2 to maintain records demonstrating compliance with this Part 2.

### § 143-40. Enforcement; penalties for offenses.

A. Notice of violation. When the Village of Islandia determines that a land development activity is not being carried out in accordance with the requirements of this Part 2, it may issue a

written notice of violation to the landowner. The notice of violation shall contain:

- (1) The name and address of the landowner, developer or applicant;
- (2) The address when available or a description of the building, structure or land upon which the violation is occurring;
- (3) A statement specifying the nature of the violation;
- (4) A description of the remedial measures necessary to bring the land development activity into compliance with this Part 2 and a time schedule for the completion of such remedial action;
- (5) A statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed;
- (6) A statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within 15 days of service of notice of violation.
- B. Stop-work orders. The Village of Islandia may issue a stop-work order for violations of this Part 2. Persons receiving a stop-work order shall be required to halt all land development activities, except those activities that address the violations leading to the stop-work order. The stop-work order shall be in effect until the Village of Islandia confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop-work order in a timely manner may result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this Part 2.
- C. Violations. Any land development activity that is commenced or is conducted contrary to this Part 2, may be restrained by injunction or otherwise abated in a manner provided by law.
- D. Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this Part 2 shall be guilty of a violation punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both for conviction of a first offense; for conviction of a second offense both of which were committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this Part 2 shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.
- E. Withholding of certificate of occupancy. If any building or land development activity is installed or conducted in violation of this Part 2, the SMO may prevent the occupancy of said building or land.
- F. Restoration of lands. Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice,

the Village of Islandia may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

### § 143-41. Fees for services.

The Village of Islandia may require any person undertaking land development activities regulated by this Part 2 to pay reasonable costs at prevailing rates for review of SWPPPs, inspections, or SMP maintenance performed by the Village of Islandia or performed by a third party for the Village of Islandia.

### § 143-42. Severability; when effective.

- A. Severability. The provisions of this Part 2 are hereby declared to be severable and if any section, clause, sentence, paragraph or phase of this Part 2 or the application thereof to any person, establishment, or circumstances shall be held invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, clause, sentences, paragraphs or phases of this Part 2, but they shall remain in effect, it being the legislative intent that this Part 2 and application of this Part 2 shall stand, notwithstanding the invalidity of any part.
- B. Effective date. This Part 2 shall take effect immediately upon filing in the office of the Secretary of State in accordance with § 27 of the Municipal Home Rule Law.

### **APPENDIX 4**

Village Code - Local Law for
Prohibition of Illicit Discharges, Activities and Connections to
Separate Storm Sewer Systems

# Part 1 Illicit Discharges, Activities And Connections To Separate Storm Sewer Systems [Adopted 3-4-2008 By L.L. No. 2-2008]

### ARTICLE I **Intent; Definitions**

### § 143-1. Intent.

The purpose of this Part 1 is to provide for the health, safety, and general welfare of the citizens of the Village of Islandia through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and state law. This Part 1 establishes methods for controlling the introduction of pollutants into the MS4 in order to comply with requirements of the SPDES General Permit for Municipal Separate Storm Sewer Systems. The objectives of this Part 1 are to:

- A. Meet the requirements of the SPDES General Permit for Stormwater Discharges from MS4s, Permit No. GP-02-02, or as amended or revised;
- B. Regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes;
- C. Prohibit illicit connections, activities and discharges to the MS4;
- D. Establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Part 1; and
- E. Promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.

### § 143-2. Definitions.

Whenever used in this Part 1, unless a different meaning is stated in a definition applicable to only a portion of this Part 1, the following terms will have meanings set forth below:

BEST MANAGEMENT PRACTICES (BMPs) — Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CLEAN WATER ACT — The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

CONSTRUCTION ACTIVITY — Activities requiring authorization under the SPDES Permit for Stormwater Discharges from Construction Activity, GP-02-01, as amended or revised. These activities include construction projects resulting in land disturbance of one or more acres. Such activities include but are not limited to clearing and grubbing, grading, excavating, and

demolition.

DEPARTMENT — The New York State Department of Environmental Conservation.

HAZARDOUS MATERIALS — Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

ILLICIT CONNECTIONS — Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the MS4, including but not limited to:

- A. Any conveyances which allow any nonstormwater discharge including treated or untreated sewage, process wastewater, and wash water to enter the MS4 and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or
- B. Any drain or conveyance connected from a commercial or industrial land use to the MS4 which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

ILLICIT DISCHARGE — Any direct or indirect nonstormwater discharge to the MS4, except as exempted in § 143-5A(1) of this Part 1.

INDUSTRIAL ACTIVITY — Activities requiring the SPDES Permit for Discharges from Industrial Activities Except Construction, GP-98-03, as amended or revised.

MUNICIPALITY — The Village of Islandia.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) — Municipal separate storm sewer system. A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains:

- A. Owned or operated by the Village of Islandia;
- B. Designed or used for collecting or conveying stormwater;
- C. Which is not a combined sewer; and
- D. Which is not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2.

NONSTORMWATER DISCHARGE — Any discharge to the MS4 that is not composed entirely of stormwater.

PERSON — Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting either as the owner or as the owner's agent.

POLLUTANT — Dredged spoil, filter backwash, solid waste, incinerator residue, treated or untreated sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be

expected to cause pollution of the waters of the state in contravention of the standards.

PREMISES — Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

### SPECIAL CONDITIONS — Conditions including:

- A. Discharge compliance with water quality standards. The condition that applies where a municipality has been notified that the discharge of stormwater authorized under its MS4 permit may have caused or has the reasonable potential to cause or contribute to the violation of an applicable water quality standard. Under this condition, the municipality must take all necessary actions to ensure future discharges do not cause or contribute to a violation of water quality standards.
- B. 303(d) listed waters. The condition in the municipality's MS4 permit that applies where the MS4 discharges to a 303(d) listed water. Under this condition the stormwater management program must ensure no increase of the listed pollutant of concern to the 303(d) listed water.
- C. Total maximum daily load (TMDL) strategy. The condition in the municipality's MS4 permit where a TMDL including requirements for control of stormwater discharges has been approved by EPA for a water body or watershed into which the MS4 discharges. If the discharge from the MS4 did not meet the TMDL stormwater allocations prior to September 10, 2003, the municipality was required to modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.
- D. The condition in the municipality's MS4 permit that applies if a TMDL is approved in the future by EPA for any water body or watershed into which an MS4 discharges. Under this condition, the municipality must review the applicable TMDL to see if it includes requirements for control of stormwater discharges. If an MS4 is not meeting the TMDL stormwater allocations, the municipality must, within six months of the TMDL's approval, modify its stormwater management program to ensure that reduction of the pollutant of concern specified in the TMDL is achieved.

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) STORMWATER DISCHARGE PERMIT — A permit issued by the Department that authorizes the discharge of pollutants to waters of the state.

STORMWATER — Rainwater, surface runoff, snowmelt and drainage.

STORMWATER MANAGEMENT OFFICER (SMO) — An employee, the municipal engineer or other public official(s) designated by the Village of Islandia to enforce this Part 1. The SMO may also be designated by the municipality to accept and review stormwater pollution prevention plans, forward the plans to the applicable municipal board and inspect stormwater management practices.

303(D) LIST — A list of all surface waters in the state for which beneficial uses of the water (drinking, recreation, aquatic habitat, and industrial use) are impaired by pollutants, prepared periodically by the Department as required by Section 303(d) of the Clean Water Act. 303(d) listed waters are estuaries, lakes and streams that fall short of state surface water quality standards

and are not expected to improve within the next two years.

TMDL — Total maximum daily load.

TOTAL MAXIMUM DAILY LOAD — The maximum amount of a pollutant to be allowed to be released into a water body so as not to impair uses of the water, allocated among the sources of that pollutant.

WASTEWATER — Water that is not stormwater, is contaminated with pollutants and is or will be discarded.

### ARTICLE II Administration and Enforcement

### § 143-3. Applicability.

This Part 1 shall apply to all water entering the MS4 generated on any developed and undeveloped lands unless explicitly exempted by an authorized enforcement agency.

### § 143-4. Responsibility for administration.

The Stormwater Management Officer(s) [SMO(s)] shall administer, implement, and enforce the provisions of this Part 1. Such powers granted or duties imposed upon the authorized enforcement official may be delegated in writing by the SMO as may be authorized by the municipality.

### § 143-5. Discharge prohibitions.

- A. Prohibition of illegal discharges. No person shall discharge or cause to be discharged into the MS4 any materials other than stormwater except as provided in § 145-5A(1). The commencement, conduct or continuance of any illegal discharge to the MS4 is prohibited except as described as follows:
  - (1) The following discharges are exempt from discharge prohibitions established by this Part 1, unless the Department or the municipality has determined them to be substantial contributors of pollutants: waterline flushing or other potable water sources, landscape irrigation or lawn watering, existing diverted stream flows, rising groundwater, uncontaminated groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains, crawl space or basement sump pumps, airconditioning condensate, irrigation water, springs, water from individual residential car washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, residential street wash water, water from fire-fighting activities, and any other water source not containing pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

#### B. Prohibition of illicit connections.

- (1) The construction, use, maintenance or continued existence of illicit connections to the MS4 is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this Part 1 if the person connects a line conveying sewage to the municipality's MS4, or allows such a connection to continue.

### § 143-6. Prohibition against activities contaminating stormwater.

- A. Activities that are subject to the requirements of this section are those types of activities that:
  - (1) Cause or contribute to a violation of the municipality's MS4 SPDES permit.

(2) Cause or contribute to the municipality being subject to the special conditions as defined in § 143-2 of this Part 1.

B. Upon notification to a person that he or she is engaged in activities that cause or contribute to violations of the municipality's MS4 SPDES permit authorization, that person shall take all reasonable actions to correct such activities such that he or she no longer causes or contributes to violations of the municipality's MS4 SPDES permit authorization.

### § 143-7. Requirement to prevent, control, and reduce stormwater pollutants by use of best management practices.

- A. Best Management Practices. Where the SMO has identified illicit discharges as defined in § 143-2 or activities contaminating stormwater as defined in § 143-6, the municipality may require implementation of best management practices (BMPs) to control those illicit discharges and activities.
  - (1) The owner or operator of a commercial or industrial establishment shall provide, at its own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the MS4 through the use of structural and nonstructural BMPs.
  - (2) Any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, as defined in § 143-2, or an activity contaminating stormwater, as defined in § 143-6, may be required to implement, at said person's expense, additional structural and nonstructural BMPs to reduce or eliminate the source of pollutant(s) to the MS4.
  - (3) Compliance with all terms and conditions of a valid SPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section.

### § 143-8. Emergency situations.

- A. Suspension of access to MS4. The SMO may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, to the health or welfare of persons, or to the MS4. The SMO shall notify the person of such suspension within a reasonable time thereafter in writing of the reasons for the suspension. If the violator fails to comply with a suspension order issued in an emergency, the SMO may take such steps as deemed necessary to prevent or minimize damage to the MS4 or to minimize danger to persons.
- B. Suspension due to the detection of illicit discharge. Any person discharging to the municipality's MS4 in violation of this Part 1 may have the person's MS4 access terminated if such termination would abate or reduce an illicit discharge. The SMO will notify a violator in writing of the proposed termination of its MS4 access and the reasons therefor. The violator may petition the SMO for a reconsideration and hearing. Access may be granted by the SMO if he/she finds that the illicit discharge has ceased and the discharger has taken steps to prevent its recurrence. Access may be denied if the SMO determines in writing that the illicit discharge has not ceased or is likely to recur. A person commits an offense if the person

reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the SMO.

### § 143-9. Industrial or construction activity discharges.

Any person subject to an industrial or construction activity SPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the municipality prior to the allowing of discharges to the MS4.

### § 143-10. Access and monitoring of discharges.

A. Applicability. This section applies to all facilities that the SMO must inspect to enforce any provision of this Part 1, or whenever the authorized enforcement agency has cause to believe that there exists, or potentially exists, in or upon any premises any condition which constitutes a violation of this Part 1.

#### B. Access to facilities.

- (1) The SMO shall be permitted to enter and inspect facilities subject to regulation under this Part 1 as often as may be necessary to determine compliance with this Part 1. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to the SMO.
- (2) Facility operators shall allow the SMO ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records as may be required to implement this Part 1.
- (3) The municipality shall have the right to set up on any facility subject to this Part 1 such devices as are necessary in the opinion of the SMO to conduct monitoring and/or sampling of the facility's stormwater discharge.
- (4) The municipality has the right to require the facilities subject to this Part 1 to install monitoring equipment as is reasonably necessary to determine compliance with this Part 1. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
- (5) Unreasonable delays in allowing the municipality access to a facility subject to this Part 1 is a violation of this Part 1. A person who is the operator of a facility subject to this Part 1 commits an offense if the person denies the municipality reasonable access to the facility for the purpose of conducting any activity authorized or required by this Part 1.
- (6) If the SMO has been refused access to any part of the premises from which stormwater is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this Part 1, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this Part 1 or any order issued hereunder, then the SMO may seek issuance of a search warrant from any court of competent jurisdiction.

### § 143-11. Notification of spills.

- A. Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into the MS4, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release.
- B. In the event of such a release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services.
- C. In the event of a release of nonhazardous materials, said person shall notify the municipality in person or by telephone or facsimile no later than the next business day. Notifications in person or by telephone shall be confirmed by written notice addressed and mailed to the municipality within three business days of the telephone notice.
- D. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

### § 143-12. Enforcement; penalties for offenses.

- A. Notice of violation. When the municipality's SMO finds that a person has violated a prohibition or failed to meet a requirement of this Part 1, he/she may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:
  - (1) The elimination of illicit connections or discharges;
  - (2) That violating discharges, practices, or operations shall cease and desist;
  - (3) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
  - (4) The performance of monitoring, analyses, and reporting;
  - (5) Payment of a fine; and
  - (6) The implementation of source control or treatment BMPs.
- B. If abatement of a violation and/or restoration of affected property is required, the notice of violation shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.
- C. Penalties. In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this Part 1 shall be guilty of a violation punishable by a fine not exceeding \$350 or imprisonment for a period not to exceed six months, or both, for conviction of a first offense; for conviction of a second offense both of which were

committed within a period of five years, punishable by a fine not less than \$350 nor more than \$700 or imprisonment for a period not to exceed six months, or both; and upon conviction for a third or subsequent offense all of which were committed within a period of five years, punishable by a fine not less than \$700 nor more than \$1,000 or imprisonment for a period not to exceed six months, or both. However, for the purposes of conferring jurisdiction upon courts and judicial officers generally, violations of this Part 1 shall be deemed misdemeanors and for such purpose only all provisions of law relating to misdemeanors shall apply to such violations. Each week's continued violation shall constitute a separate additional violation.

### § 143-13. Appeal of notice of violation.

Any person receiving a notice of violation may appeal the determination of the SMO to the Village Board of Trustees within 15 days of its issuance, which shall hear the appeal within 30 days after the filing of the appeal, and within five days of making its decision, file its decision in the office of the Municipal Clerk and mail a copy of its decision by certified mail to the discharger.

### § 143-14. Corrective measures after appeal.

- A. If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within five business days of the decision of the municipal authority upholding the decision of the SMO, then the SMO shall request the owner's permission for access to the subject private property to take any and all measures reasonably necessary to abate the violation and/or restore the property.
- B. If refused access to the subject private property, the SMO may seek a warrant in a court of competent jurisdiction to be authorized to enter upon the property to determine whether a violation has occurred. Upon determination that a violation has occurred, the SMO may seek a court order to take any and all measures reasonably necessary to abate the violation and/or restore the property. The cost of implementing and maintaining such measures shall be the sole responsibility of the discharger.

### § 143-15. Injunctive relief.

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Part 1. If a person has violated or continues to violate the provisions of this Part 1, the SMO may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

### § 143-16. Alternative remedies.

- A. Where a person has violated a provision of this Part 1, he/she may be eligible for alternative remedies in lieu of a civil penalty, upon recommendation of the Municipal Attorney and concurrence of the Municipal Code Enforcement Officer, where:
  - (1) The violation was unintentional.
  - (2) The violator has no history of previous violations of this Part 1.

- (3) Environmental damage was minimal.
- (4) The violator acted quickly to remedy violation.
- (5) The violator cooperated in investigation and resolution.
- B. Alternative remedies may consist of one or more of the following:
  - (1) Attendance at compliance workshops.
  - (2) Storm drain stenciling or storm drain marking.
  - (3) River, stream or creek cleanup activities.

### § 143-17. Violations deemed public nuisance.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Part 1 is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

### § 143-18. Remedies not exclusive.

The remedies listed in this Part 1 are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

### § 143-19. Severability.

The provisions of this Part 1 are hereby declared to be severable and if any section, clause, sentence, paragraph or phase of this Part 1 or the application thereof to any person, establishment, or circumstances shall be held invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, clause, sentences, paragraphs or phases of this Part 1, but they shall remain in effect, it being the legislative intent that this Part 1 and application of this Part 1 shall stand, notwithstanding the invalidity of any part.

### **APPENDIX 5**

SPDES General Permit for Stormwater Discharges

From

Construction Activity (Permit No. GP-0-20-001)



### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

From

### **CONSTRUCTION ACTIVITY**

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020 Expiration Date: January 28, 2025

John J. Ferguson

**Chief Permit Administrator** 

Authorized Signature

Date

1-23-20

Address:

**NYS DEC** 

Division of Environmental Permits

625 Broadway, 4th Floor Albany, N.Y. 12233-1750

#### **PREFACE**

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System* ("NPDES") permit or by a state permit program. New York administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

An owner or operator of a construction activity that is eligible for coverage under this permit must obtain coverage prior to the commencement of construction activity. Activities that fit the definition of "construction activity", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to ECL section 17-0505 and 17-0701, the owner or operator must have coverage under a SPDES permit prior to commencing construction activity. The owner or operator cannot wait until there is an actual discharge from the construction site to obtain permit coverage.

\*Note: The italicized words/phrases within this permit are defined in Appendix A.

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

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#### Part 1. PERMIT COVERAGE AND LIMITATIONS

### A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

- Construction activities involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
- Construction activities involving soil disturbances of less than one (1) acre
  where the Department has determined that a SPDES permit is required for
  stormwater discharges based on the potential for contribution to a violation of a
  water quality standard or for significant contribution of pollutants to surface
  waters of the State.
- 3. Construction activities located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

### B. Effluent Limitations Applicable to Discharges from Construction Activities

Discharges authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) - (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* ("SWPPP") the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

- a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:
  - (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
  - (ii) Control stormwater *discharges*, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;
  - (iii) Minimize the amount of soil exposed during construction activity;
  - (iv) Minimize the disturbance of steep slopes;
  - (v) *Minimize* sediment *discharges* from the site;
  - (vi) Provide and maintain *natural buffers* around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharges*, unless *infeasible*;
  - (vii) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;
  - (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and
  - (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.
- b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments

listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

- c. **Dewatering**. *Discharges* from *dewatering* activities, including *discharges* from *dewatering* of trenches and excavations, must be managed by appropriate control measures.
- d. Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of pollutants and prevent a violation of the water quality standards. At a minimum, such measures must be designed, installed, implemented and maintained to:
  - (i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used:
  - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
  - (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.
- e. **Prohibited** *Discharges*. The following *discharges* are prohibited:
  - (i) Wastewater from washout of concrete;
  - (ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

- (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
- (iv) Soaps or solvents used in vehicle and equipment washing; and
- (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

### C. Post-construction Stormwater Management Practice Requirements

- 1. The owner or operator of a construction activity that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the performance criteria in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the performance criteria in the Design Manual, the owner or operator must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standard.
- 2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

### a. Sizing Criteria for New Development

- (i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site discharges directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.

## b. Sizing Criteria for New Development in Enhanced Phosphorus Removal Watershed

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.

### c. Sizing Criteria for Redevelopment Activity

- (i) Water Quality Volume (WQv): The WQv treatment objective for redevelopment activity shall be addressed by one of the following options. Redevelopment activities located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other redevelopment activities shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
  - (1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
  - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
  - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
  - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1-4 above.

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the discharge rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the discharge rate from the project site.
- (iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

# d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both New Development and Redevelopment Activity shall provide post-construction stormwater management controls that meet the sizing criteria calculated as an aggregate of the Sizing Criteria in Part I.C.2.a. or b. of this permit for the New Development portion of the project and Part I.C.2.c of this permit for Redevelopment Activity portion of the project.

### D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control discharges necessary to meet applicable water quality standards. It shall be a violation of the ECL for any discharge to either cause or contribute to a violation of water quality standards as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

- 1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions:
- 2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
- 3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

# E. Eligibility Under This General Permit

- 1. This permit may authorize all *discharges* of stormwater from *construction* activity to surface waters of the State and groundwaters except for ineligible discharges identified under subparagraph F. of this Part.
- 2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges*; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.
- 3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated discharges from construction site de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the owner or operator must still comply with water quality standards in Part I.D of this permit.
- 4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

# F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

- 1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;
- 2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
- 3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
- 4. Construction activities or discharges from construction activities that may adversely affect an endangered or threatened species unless the owner or

operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

- 5. *Discharges* which either cause or contribute to a violation of *water quality* standards adopted pursuant to the *ECL* and its accompanying regulations;
- 6. Construction activities for residential, commercial and institutional projects:
  - a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which are undertaken on land with no existing impervious cover, and
  - c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.
- 7. Construction activities for linear transportation projects and linear utility projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s: and
  - b. Which are undertaken on land with no existing *impervious cover*, and
  - c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

- 8. Construction activities that have the potential to affect an historic property, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
  - a. Documentation that the construction activity is not within an archeologically sensitive area indicated on the sensitivity map, and that the construction activity is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
    - 1-5 acres of disturbance 20 feet
    - 5-20 acres of disturbance 50 feet
    - 20+ acres of disturbance 100 feet, or
  - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
    - (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
    - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
    - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
    - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
  - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

- (i) No Affect
- (ii) No Adverse Affect
- (iii) Executed Memorandum of Agreement, or

### d. Documentation that:

- (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.
- 9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

### Part II. PERMIT COVERAGE

# A. How to Obtain Coverage

- An owner or operator of a construction activity that is not subject to the
  requirements of a regulated, traditional land use control MS4 must first prepare
  a SWPPP in accordance with all applicable requirements of this permit and
  then submit a completed Notice of Intent (NOI) to the Department to be
  authorized to discharge under this permit.
- 2. An owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the regulated, traditional land use control MS4 prior to submitting the NOI to the Department. The owner or operator shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.
- 3. The requirement for an owner or operator to have its SWPPP reviewed and accepted by the regulated, traditional land use control MS4 prior to submitting the NOI to the Department does not apply to an owner or operator that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of Owner or Operator) or where the owner or operator of the construction activity is the regulated, traditional land use control MS4. This exemption does not apply to construction activities subject to the New York City Administrative Code.

# B. Notice of Intent (NOI) Submittal

 Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

> NOTICE OF INTENT NYS DEC, Bureau of Water Permits 625 Broadway, 4<sup>th</sup> Floor Albany, New York 12233-3505

- 2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.
- 3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.
- 4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

### C. Permit Authorization

- 1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
- 2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
  - a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,
  - b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

- c. the final SWPPP has been prepared, and
- d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
- 3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:
  - a. For *construction activities* that are <u>not</u> subject to the requirements of a *regulated, traditional land use control MS4*:
    - (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for construction activities with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the performance criteria in the technical standard referenced in Parts III.B., 2 or 3, for construction activities that require post-construction stormwater management practices pursuant to Part III.C.; or
    - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has <u>not</u> been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
    - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for construction activities with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the performance criteria in the technical standard referenced in Parts III.B., 2 or 3, for construction activities that require post-construction stormwater management practices pursuant to Part III.C.

- b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:
  - (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "MS4 SWPPP Acceptance" form, or
  - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.
- 4. Coverage under this permit authorizes stormwater discharges from only those areas of disturbance that are identified in the NOI. If an owner or operator wishes to have stormwater discharges from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The owner or operator shall not commence construction activity on the future or additional areas until their authorization to discharge under this permit goes into effect in accordance with Part II.C. of this permit.

# D. General Requirements For Owners or Operators With Permit Coverage

- The owner or operator shall ensure that the provisions of the SWPPP are implemented from the commencement of construction activity until all areas of disturbance have achieved final stabilization and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
- 2. The owner or operator shall maintain a copy of the General Permit (GP-0-20-001), NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved final stabilization and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
- 3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated*, *traditional land*

use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity). At a minimum, the owner or operator must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

- a. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
- b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.
- c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
- d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.
- e. The *owner or operator* shall include the requirements above in their SWPPP.
- 4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..
- 5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
- 6. For construction activities that are subject to the requirements of a regulated, traditional land use control MS4, the owner or operator shall notify the

regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the regulated, traditional land use control MS4, the owner or operator shall have the SWPPP amendments or modifications reviewed and accepted by the regulated, traditional land use control MS4 prior to commencing construction of the post-construction stormwater management practice.

# E. Permit Coverage for Discharges Authorized Under GP-0-15-002

 Upon renewal of SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002), an owner or operator of a construction activity with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to discharge in accordance with GP- 0-20-001, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

# F. Change of Owner or Operator

- 1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4*, the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.
- 2. Once the new owner or operator obtains permit coverage, the original owner or operator shall then submit a completed NOT with the name and permit identification number of the new owner or operator to the Department at the address in Part II.B.1. of this permit. If the original owner or operator maintains ownership of a portion of the construction activity and will disturb soil, they must maintain their coverage under the permit.
- 3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

operator was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new owner or operator.

# Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

# A. General SWPPP Requirements

- 1. A SWPPP shall be prepared and implemented by the owner or operator of each construction activity covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the commencement of construction activity. A copy of the completed, final NOI shall be included in the SWPPP.
- 2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
- 3. All SWPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
- 4. The owner or operator must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the owner or operator shall amend the SWPPP, including construction drawings:
  - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

- b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the discharge of pollutants;
- c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority; and
- d. to document the final construction conditions.
- 5. The Department may notify the *owner or operator* at any time that the SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.
- 6. Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

### **B.** Required SWPPP Contents

- 1. Erosion and sediment control component All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
  - a. Background information about the scope of the project, including the location, type and size of project

- b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the construction activity; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s);
- c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
- d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;
- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;
- i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the stormwater discharges;
- k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site, including, but not limited to, stormwater discharges from asphalt plants and concrete plants located on the construction site; and
- I. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standard.
- 2. Post-construction stormwater management practice component The owner or operator of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable sizing criteria in Part I.C.2.a., c. or d. of this permit and the performance criteria in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

The post-construction stormwater management practice component of the SWPPP shall include the following:

 a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;

- A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
  - Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
  - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
  - (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;
  - (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
  - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

# C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

### Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

# A. General Construction Site Inspection and Maintenance Requirements

- 1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
- 2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

# **B. Contractor Maintenance Inspection Requirements**

1. The owner or operator of each construction activity identified in Tables 1 and 2 of Appendix B shall have a trained contractor inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

- 2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the trained contractor can stop conducting the maintenance inspections. The trained contractor shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
- 3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

# C. Qualified Inspector Inspection Requirements

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- New York State Erosion and Sediment Control Certificate Program holder
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].
- 1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, <u>with the exception of</u>:
  - a. the construction of a single family residential subdivision with 25% or less impervious cover at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

- in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;
- the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;
- c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
- d. construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
- 2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
  - a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
  - b. For construction sites where soil disturbance activities are on-going and the owner or operator has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
  - c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the qualified inspector shall conduct a site inspection at least once every thirty (30) calendar days. The owner or operator shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity) in writing prior to reducing the frequency of inspections.

- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The owner or operator shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the owner or operator shall have the qualified inspector perform a final inspection and certify that all disturbed areas have achieved *final* stabilization, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction" Stormwater Management Practice" certification statements on the NOT. The owner or operator shall then submit the completed NOT form to the address in Part II.B.1 of this permit.
- e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
- 3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.
- 4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

- a. Date and time of inspection;
- b. Name and title of person(s) performing inspection;
- c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
- d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
- e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface waterbody;
- f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
- g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
- Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;
- Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the postconstruction stormwater management practice(s);
- Identification and status of all corrective actions that were required by previous inspection; and

- I. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
- 5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
- 6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

### Part V. TERMINATION OF PERMIT COVERAGE

# A. Termination of Permit Coverage

- An owner or operator that is eligible to terminate coverage under this permit
  must submit a completed NOT form to the address in Part II.B.1 of this permit.
  The NOT form shall be one which is associated with this permit, signed in
  accordance with Part VII.H of this permit.
- 2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
  - a. Total project completion All construction activity identified in the SWPPP has been completed; <u>and</u> all areas of disturbance have achieved *final* stabilization; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

- b. Planned shutdown with partial project completion All soil disturbance activities have ceased; <u>and</u> all areas disturbed as of the project shutdown date have achieved *final stabilization*; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
- c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.
- d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
- 3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
- 4. For construction activities that are subject to the requirements of a regulated, traditional land use control MS4 and meet subdivision 2a. or 2b. of this Part, the owner or operator shall have the regulated, traditional land use control MS4 sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The regulated, traditional land use control MS4 official, by signing this statement, has determined that it is acceptable for the owner or operator to submit the NOT in accordance with the requirements of this Part. The regulated, traditional land use control MS4 can make this determination by performing a final site inspection themselves or by accepting the qualified inspector's final site inspection certification(s) required in Part V.A.3. of this permit.
- 5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
  - a. the post-construction stormwater management practice(s) and any right-ofway(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator*'s deed of record,
- d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

### Part VI. REPORTING AND RETENTION RECORDS

#### A. Record Retention

The *owner or operator* shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

# **B.** Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.B.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

### Part VII. STANDARD PERMIT CONDITIONS

### A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

# **B.** Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

### C. Enforcement

Failure of the *owner or operator*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

### D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

# E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

# F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

### G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

### H. Signatory Requirements

- 1. All NOIs and NOTs shall be signed as follows:
  - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
  - (i) the chief executive officer of the agency, or
  - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- 2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
- 3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
- 4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4,* or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

# I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

# J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

# K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to discharge under a general SPDES permit for the same discharge(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

# L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

# M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- Enter upon the owner's or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- 2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

- Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
- 4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

### N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

#### O. Definitions

Definitions of key terms are included in Appendix A of this permit.

# P. Re-Opener Clause

- 1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
- Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

# Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

# **R. Other Permits**

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

# **APPENDIX A – Acronyms and Definitions**

# **Acronyms**

APO – Agency Preservation Officer

BMP - Best Management Practice

CPESC - Certified Professional in Erosion and Sediment Control

Cpv – Channel Protection Volume

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)

DOW - Division of Water

EAF – Environmental Assessment Form

ECL - Environmental Conservation Law

EPA – U. S. Environmental Protection Agency

HSG – Hydrologic Soil Group

MS4 – Municipal Separate Storm Sewer System

NOI – Notice of Intent

NOT – Notice of Termination

NPDES - National Pollutant Discharge Elimination System

OPRHP – Office of Parks, Recreation and Historic Places

Qf – Extreme Flood

Qp - Overbank Flood

RRv - Runoff Reduction Volume

RWE – Regional Water Engineer

SEQR - State Environmental Quality Review

SEQRA - State Environmental Quality Review Act

SHPA – State Historic Preservation Act

SPDES – State Pollutant Discharge Elimination System

SWPPP – Stormwater Pollution Prevention Plan

TMDL - Total Maximum Daily Load

UPA – Uniform Procedures Act

USDA - United States Department of Agriculture

WQv - Water Quality Volume

### **Definitions**

All definitions in this section are solely for the purposes of this permit.

**Agricultural Building** – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

**Agricultural Property** –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

**Combined Sewer -** means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "Construction Activity(ies)" also.

**Construction Activity(ies)** - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

**Construction Site** – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities*" and "*Larger Common Plan of Development or Sale*" also.

**Dewatering** – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

**Direct Discharge (to a specific surface waterbody) -** means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

**Discharge(s)** - means any addition of any pollutant to waters of the State through an outlet or *point source*.

**Embankment** –means an earthen or rock slope that supports a road/highway.

**Endangered or Threatened Species** – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

**Environmental Conservation Law (ECL)** - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

**Equivalent (Equivalence)** – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

**Final Stabilization -** means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

**General SPDES permit** - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

**Groundwater(s)** - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

**Historic Property** – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State or National Registers of Historic Places.

**Impervious Area (Cover) -** means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

**Infeasible** – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

**Minimize** – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

**Municipal Separate Storm Sewer (MS4)** - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer, and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

**National Pollutant Discharge Elimination System (NPDES)** - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

**Natural Buffer** –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

**New Development** – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

**NOI Acknowledgment Letter** - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

**Nonpoint Source** - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

**Overbank** –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

**Owner or Operator** - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

**Performance Criteria** – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

**Point Source** - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

**Pollutant** - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq.

**Qualified Inspector** - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York.

**Redevelopment Activity(ies)** – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

**Regulated, Traditional Land Use Control MS4 -** means a city, town or village with land use control authority that is authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

**Routine Maintenance Activity -** means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that stabilizes the transition between the road shoulder and the ditch or *embankment*,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material.
- Long-term use of equipment storage areas at or near highway maintenance facilities,
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or *embankment*,
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

**Site limitations** – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

**Sizing Criteria** – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), *Overbank* Flood (Qp), and Extreme Flood (Qf).

**State Pollutant Discharge Elimination System (SPDES)** - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

**Steep Slope** – means land area designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

**Streambank** – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

**Stormwater Pollution Prevention Plan (SWPPP)** – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

**Surface Waters of the State** - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

**Temporarily Ceased** – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

**Temporary Stabilization** - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

**Total Maximum Daily Loads** (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and *nonpoint sources*. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for *point source* discharges, load allocations (LAs) for *nonpoint sources*, and a margin of safety (MOS).

**Trained Contractor -** means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, New York State Erosion and Sediment Control Certificate Program holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The *trained contractor* is responsible for the day to day implementation of the SWPPP.

**Uniform Procedures Act (UPA) Permit** - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

**Water Quality Standard** - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

#### **APPENDIX B – Required SWPPP Components by Project Type**

# Table 1 Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other agricultural building, silo, stock yard or pen.

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- · Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- · Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.
- · Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

## Table 1 (Continued) Construction Activities that Require the Preparation of a SWPPP

#### THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

- · Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that alter hydrology from pre to post development conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious* area and do not alter hydrology from pre to post development conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

#### Table 2

## CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- · Single family home that disturbs five (5) or more acres of land
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- · Amusement parks
- · Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or alter the hydrology from pre to post development conditions
- · Commercial developments
- Churches and other places of worship
- Construction of a barn or other agricultural building (e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- · Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- · Playgrounds that include the construction or reconstruction of impervious area
- · Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

#### **Table 2 (Continued)**

## CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or alter the hydrology from pre to post development conditions, and are not listed in Table 1

#### **APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal**

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River Figure 1
- Onondaga Lake Watershed Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed Figure 4
- Kinderhook Lake Watershed Figure 5

Figure 1 - New York City Watershed East of the Hudson

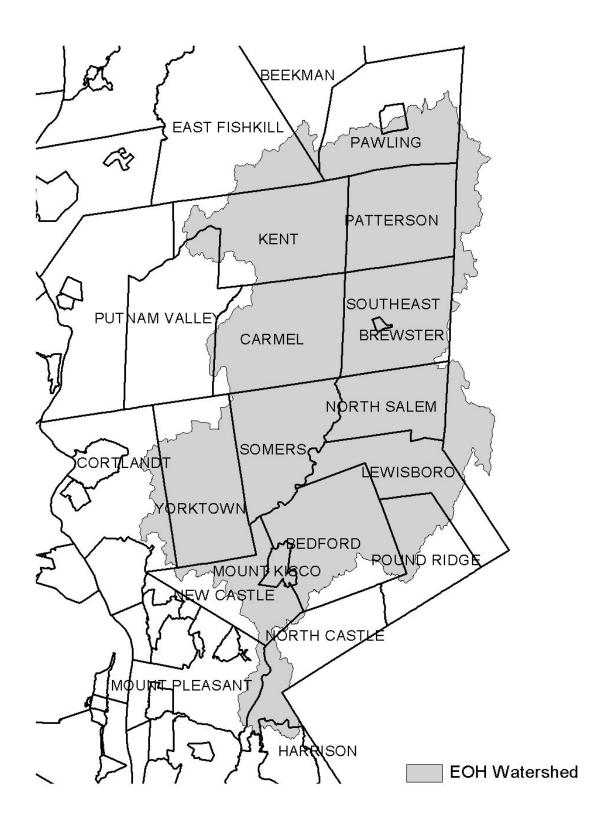


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

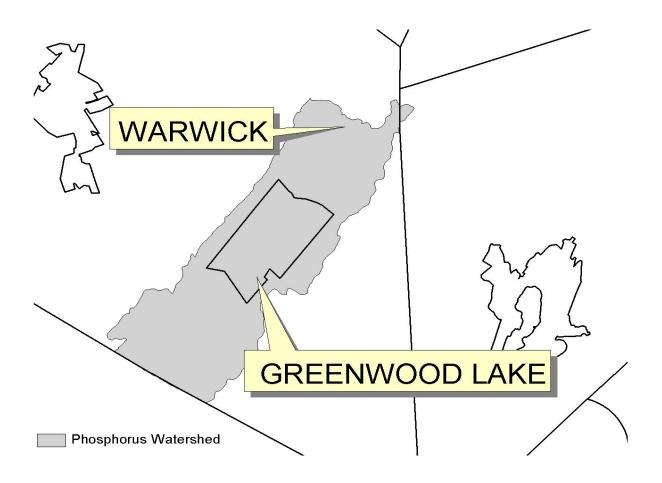


Figure 4 - Oscawana Lake Watershed

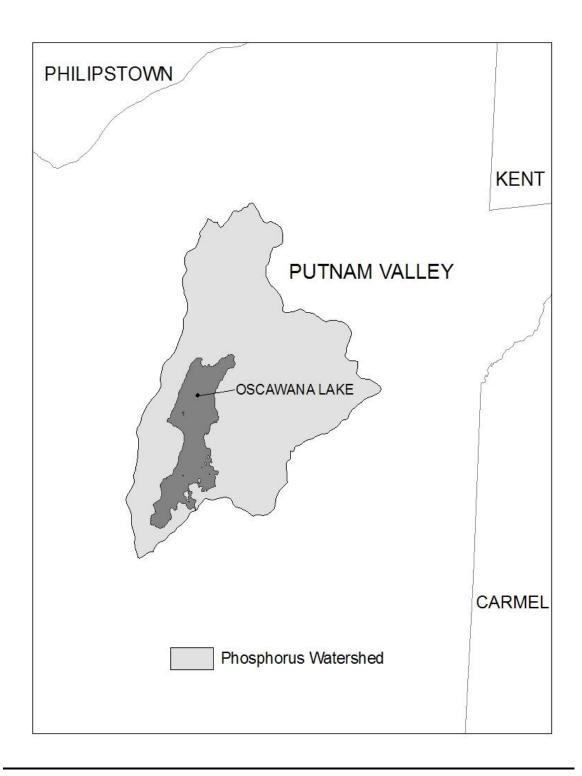
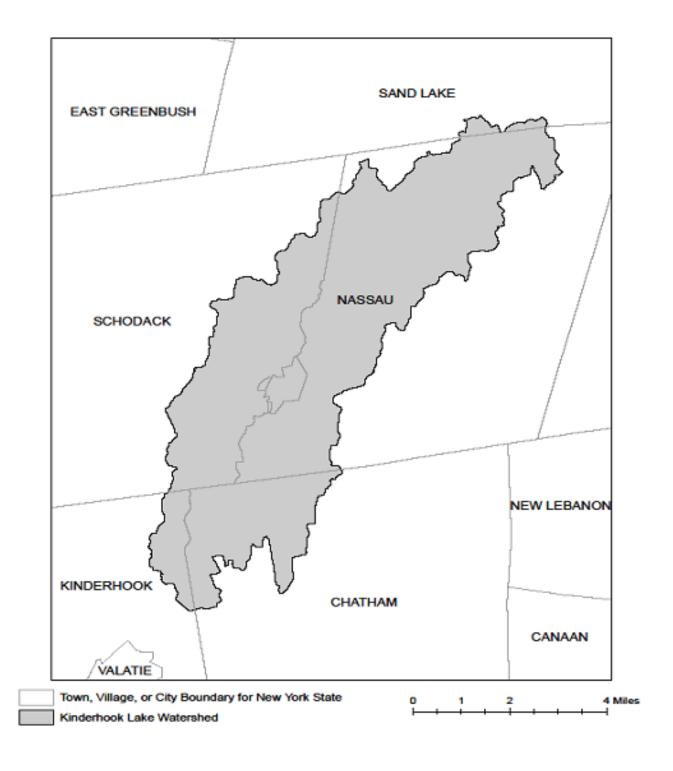


Figure 5 - Kinderhook Lake Watershed



#### APPENDIX D - Watersheds with Lower Disturbance Threshold

Watersheds where *owners or operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

#### **APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)**

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

Warren Warren	Indian Brook and tribs  Lake George	Silt/Sediment
Warren	Lake George	
		Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

### APPENDIX F – List of NYS DEC Regional Offices

<u>Region</u>	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS	DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 Tel. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 Tel. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 Tel. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 Tel. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 Ray Brook, Ny 12977-0296 Tel. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

### **APPENDIX 6**

# Acceptable Runoff Reduction and Stormwater Management Practices for Water Quality

For additional practices and further information – see the latest edition of

NYSDEC Stormwater Management Design Manual

	Table 3.3 Standard Sto	rmwater Management Practices Acceptable for Water Quality
Group	Practice	Description
	Micropool Extended Detention Pond (P-1)	Pond that treats the majority of the water quality volume through extended detention and incorporates a micropool at the outlet of the pond to prevent sediment resuspension.
Pond	Wet Pond (P-2)	Pond that provides storage for the entire water quality volume in the permanent pool.
	Wet Extended Detention Pond (P-3)	Pond that treats a portion of the water quality volume by detaining storm flows above a permanent pool for a specified minimum detention time.
	Multiple Pond System (P-4)	A group of ponds that collectively treat the water quality volume.
	Shallow Wetland (W-1)	A wetland that provides water quality treatment entirely in a wet shallow marsh.
	Extended Detention Wetland (W-2)	A wetland system that provides some fraction of the water quality volume by detaining storm flows above the marsh surface.
Wetland	Pond/ Wetland System (W-3)	A wetland system that provides a portion of the water quality volume in the permanent pool of a wet pond that precedes the marsh for a specified minimum detention time.
welland	Pocket Wetland (W-4)	A shallow wetland design adapted for the treatment of runoff from small drainage areas that has variable water levels and relies on groundwater for its permanent pool.
	Gravel Wetland (W-5)	A wetland system filled with crushed stone that allows water quality volume to flow subsurface through the root zone.
	Infiltration Trench (I-1)	An infiltration practice that stores the water quality volume in the void spaces of a gravel trench before it is infiltrated into the ground.
	Infiltration Basin (I-2)	An infiltration practice that stores the water quality volume in a shallow depression, before it is infiltrated it into the ground.
Infiltration	Dry Well (I-3)	An infiltration practice that includes a shallow excavation filled with stone or an underground perforated structure surrounded by stone, that is designed to intercept and temporarily store runoff to promote infiltration into the surrounding native soils.
	Underground Infiltration (I-4)	An infiltration practice below grade that stores the water quality volume in premanufactured pipes, vaults or other modular structures, before it is infiltrated into the ground.
	Surface Sand Filter (F-1)	A filtering practice that treats stormwater by settling out larger particles in a sediment chamber, and then filtering stormwater through a sand matrix.
	Underground Sand Filter (F-2)	A filtering practice that treats stormwater as it flows through underground settling and filtering chambers.
Filtering	Perimeter Sand Filter (F-3)	A filter that incorporates a sediment chamber and filer bed as parallel vaults adjacent to a parking lot.
Practices	Filtration Bioretention (F-4)	A shallow depression that treats stormwater as it flows through a soil matrix and is returned to the storm drain system.
	Infiltration Bioretention (F-5)	A shallow depression that treats stormwater as it flows through a soil matrix, before it is infiltrated into the ground.
	Bioslope (F-6)	Permeable engineered soil media that is installed along embankments or other slopes, designed to capture and treat stormwater runoff from adjacent impervious surfaces.
Open	Dry Swale (O-1)	An open drainage channel or depression explicitly designed to detain and promote the filtration of stormwater runoff into the soil media.
Channels	Wet Swale (O-2)	An open drainage channel or depression designed to retain water or intercept groundwater for water quality treatment.

### **APPENDIX 7**

### Stormwater and Erosion Control Details

For additional details - see the latest edition of the

NYS Standards and Specifications for Erosion and Sediment Control

## STANDARD AND SPECIFICATIONS FOR CONSTRUCTION ROAD STABILIZATION



#### **Definition & Scope**

The stabilization of temporary construction access routes, on-site vehicle transportation routes, and construction parking areas to control erosion on temporary construction routes and parking areas.

#### **Conditions Where Practice Applies**

All traffic routes and parking areas for temporary use by construction traffic.

#### **Design Criteria**

Construction roads should be located to reduce erosion potential, minimize impact on existing site resources, and maintain operations in a safe manner. Highly erosive soils, wet or rocky areas, and steep slopes should be avoided. Roads should be routed where seasonal water tables are deeper than 18 inches. Surface runoff and control should be in accordance with other standards.

**Road Grade** – A maximum grade of 12% is recommended, although grades up to 15% are possible for short distances.

**Road Width** – 12 foot minimum for one-way traffic or 24 foot minimum for two-way traffic.

**Side Slope of Road Embankment** – 2:1 or flatter.

**Ditch Capacity** – On-site roadside ditch and culvert capacities shall be the 10 yr. peak runoff.

**Composition** – Use a 6-inch layer of NYS DOT sub-base Types 1,2,3, 4 or equivalent as specified in NYSDOT Standard Specifications.

#### **Construction Specifications**

- 1. Clear and strip roadbed and parking areas of all vegetation, roots, and other objectionable material.
- 2. Locate parking areas on naturally flat areas as available. Keep grades sufficient for drainage, but not more than 2 to 3 percent.
- 3. Provide surface drainage and divert excess runoff to stabilized areas.
- 4. Maintain cut and fill slopes to 2:1 or flatter and stabilized with vegetation as soon as grading is accomplished.
- 5. Spread 6-inch layer of sub-base material evenly over the full width of the road and smooth to avoid depressions.
- 6. Provide appropriate sediment control measures to prevent offsite sedimentation.

#### **Maintenance**

Inspect construction roads and parking areas periodically for condition of surface. Top dress with new gravel as needed. Check ditches for erosion and sedimentation after rainfall events. Maintain vegetation in a healthy, vigorous condition. Areas producing sediment should be treated immediately.

## STANDARD AND SPECIFICATIONS FOR CONCRETE TRUCK WASHOUT



#### **Definition & Scope**

A temporary excavated or above ground lined constructed pit where concrete truck mixers and equipment can be washed after their loads have been discharged, to prevent highly alkaline runoff from entering storm drainage systems or leaching into soil.

#### **Conditions Where Practice Applies**

Washout facilities shall be provided for every project where concrete will be poured or otherwise formed on the site. This facility will receive highly alkaline wash water from the cleaning of chutes, mixers, hoppers, vibrators, placing equipment, trowels, and screeds. Under no circumstances will wash water from these operations be allowed to infiltrate into the soil or enter surface waters.

#### **Design Criteria**

Capacity: The washout facility should be sized to contain solids, wash water, and rainfall and sized to allow for the evaporation of the wash water and rainfall. Wash water shall be estimated at 7 gallons per chute and 50 gallons per hopper of the concrete pump truck and/or discharging drum. The minimum size shall be 8 feet by 8 feet at the bottom and 2 feet deep. If excavated, the side slopes shall be 2 horizontal to 1 vertical.

**Location:** Locate the facility a minimum of 100 feet from drainage swales, storm drain inlets, wetlands, streams and other surface waters. Prevent surface water from entering the structure except for the access road. Provide appropriate access with a gravel access road sloped down to the structure. Signs shall be placed to direct drivers to the facility after their load is discharged.

**Liner:** All washout facilities will be lined to prevent

leaching of liquids into the ground. The liner shall be plastic sheeting with a minimum thickness of 10 mils with no holes or tears, and anchored beyond the top of the pit with an earthen berm, sand bags, stone, or other structural appurtenance except at the access point.

If pre-fabricated washouts are used they must ensure the capture and containment of the concrete wash and be sized based on the expected frequency of concrete pours. They shall be sited as noted in the location criteria.

#### **Maintenance**

- All concrete washout facilities shall be inspected daily. Damaged or leaking facilities shall be deactivated and repaired or replaced immediately. Excess rainwater that has accumulated over hardened concrete should be pumped to a stabilized area, such as a grass filter strip.
- Accumulated hardened material shall be removed when 75% of the storage capacity of the structure is filled. Any excess wash water shall be pumped into a containment vessel and properly disposed of off site.
- Dispose of the hardened material off-site in a construction/demolition landfill. On-site disposal may be allowed if this has been approved and accepted as part of the projects SWPPP. In that case, the material should be recycled as specified, or buried and covered with a minimum of 2 feet of clean compacted earthfill that is permanently stabilized to prevent erosion.
- The plastic liner shall be replaced with each cleaning of the washout facility.
- Inspect the project site frequently to ensure that no concrete discharges are taking place in non-designated areas.

## STANDARD AND SPECIFICATIONS FOR DUST CONTROL



#### **Definition & Scope**

The control of dust resulting from land-disturbing activities, to prevent surface and air movement of dust from disturbed soil surfaces that may cause off-site damage, health hazards, and traffic safety problems.

#### **Conditions Where Practice Applies**

On construction roads, access points, and other disturbed areas subject to surface dust movement and dust blowing where off-site damage may occur if dust is not controlled.

#### **Design Criteria**

Construction operations should be scheduled to minimize the amount of area disturbed at one time.

Buffer areas of vegetation should be left where practical. Temporary or permanent stabilization measures shall be installed. No specific design criteria is given; see construction specifications below for common methods of dust control.

Water quality must be considered when materials are selected for dust control. Where there is a potential for the material to wash off to a stream, ingredient information must be provided to the NYSDEC.

No polymer application shall take place without written approval from the NYSDEC.

#### **Construction Specifications**

A. Non-driving Areas – These areas use products and materials applied or placed on soil surfaces to prevent airborne migration of soil particles.

**Vegetative Cover** – For disturbed areas not subject to traffic, vegetation provides the most practical method of

dust control (see Section 3).

**Mulch** (including gravel mulch) – Mulch offers a fast effective means of controlling dust. This can also include rolled erosion control blankets.

Spray adhesives – These are products generally composed of polymers in a liquid or solid form that are mixed with water to form an emulsion that is sprayed on the soil surface with typical hydroseeding equipment. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations for the specific soils on the site. In no case should the application of these adhesives be made on wet soils or if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators and others working with the material.

B. **Driving Areas** – These areas utilize water, polymer emulsions, and barriers to prevent dust movement from the traffic surface into the air.

**Sprinkling** – The site may be sprayed with water until the surface is wet. This is especially effective on haul roads and access route to provide short term limited dust control.

Polymer Additives – These polymers are mixed with water and applied to the driving surface by a water truck with a gravity feed drip bar, spray bar or automated distributor truck. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations. Incorporation of the emulsion into the soil will be done to the appropriate depth based on expected traffic. Compaction after incorporation will be by vibratory roller to a minimum of 95%. The prepared surface shall be moist and no application of the polymer will be made if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators working with the material.

**Barriers** – Woven geo-textiles can be placed on the driving surface to effectively reduce dust throw and particle migration on haul roads. Stone can also be used for construction roads for effective dust control.

**Windbreak** – A silt fence or similar barrier can control air currents at intervals equal to ten times the barrier height. Preserve existing wind barrier vegetation as much as practical.

#### **Maintenance**

Maintain dust control measures through dry weather periods until all disturbed areas are stabilized.

## STANDARD AND SPECIFICATIONS FOR PROTECTING VEGETATION DURING CONSTRUCTION



#### **Definition & Scope**

The protection of trees, shrubs, ground cover and other vegetation from damage by construction equipment. In order to preserve existing vegetation determined to be important for soil erosion control, water quality protection, shade, screening, buffers, wildlife habitat, wetland protection, and other values.

#### **Conditions Where Practices Applies**

On planned construction sites where valued vegetation exists and needs to be preserved.

#### **Design Criteria**

#### 1. Planning Considerations

#### A. Inventory:

- 1) Property boundaries, topography, vegetation and soils information should be gathered. Identify potentially high erosion areas, areas with tree windthrow potential, etc. A vegetative cover type map should be made on a copy of a topographic map which shows other natural and manmade features. Vegetation that is desirable to preserve because of its value for screening, shade, critical erosion control, endangered species, aesthetics, etc., should be identified and marked on the map.
- 2) Based upon this data, general statements should be prepared about the present condition, potential problem areas, and unique features of the property.

#### B. Planning:

1) After engineering plans (plot maps) are prepared, another field review should take place and

recommendations made for the vegetation to be saved. Minor adjustments in location of roads, dwellings, and utilities may be needed. Construction on steep slopes, erodible soils, wetlands, and streams should be avoided. Clearing limits should be delineated (See "Determine Limits of Clearing and Grading" on page 2.2).

- 2) Areas to be seeded and planted should be identified. Remaining vegetation should blend with their surroundings and/or provide special function such as a filter strip, buffer zone, or screen.
- 3) Trees and shrubs of special seasonal interest, such as flowering dogwood, red maple, striped maple, serviceberry, or shadbush, and valuable potential shade trees should be identified and marked for special protective treatment as appropriate.
- 4) Trees to be cut should be marked on the plans. If timber can be removed for salable products, a forester should be consulted for marketing advice.
- 5) Trees that may become a hazard to people, personal property, or utilities should be removed. These include trees that are weak-wooded, disease-prone, subject to windthrow, or those that have severely damaged root systems.
- 6) The vigor of remaining trees may be improved by a selective thinning. A forester should be consulted for implementing this practice.

#### 2. Measures to Protect Vegetation

- A. Limit soil placement over existing tree and shrub roots to a maximum of 3 inches. Soils with loamy texture and good structure should be used.
- B. Use retaining walls and terraces to protect roots of trees and shrubs when grades are lowered. Lowered grades should start no closer than the dripline of the tree. For narrow-canopied trees and shrubs, the stem diameter in inches is converted to feet and doubled, such that a 10 inch tree should be protected to 20 feet.
- C. Trenching across tree root systems should be the same minimum distance from the trunk, as in "B". Tunnels under root systems for underground utilities should start 18 inches or deeper below the normal ground surface. Tree roots which must be severed should be cut clean. Backfill material that will be in contact with the roots should be topsoil or a prepared planting soil mixture.
- D. Construct sturdy fences, or barriers, of wood, steel, or other protective material around valuable

vegetation for protection from construction equipment. Place barriers far enough away from trees, but not less than the specifications in "B", so that tall equipment such as backhoes and dump trucks do not contact tree branches.

- E. Construction limits should be identified and clearly marked to exclude equipment.
- F. Avoid spills of oil/gas and other contaminants.
- G. Obstructive and broken branches should be pruned properly. The branch collar on all branches whether living or dead should not be damaged. The 3 or 4 cut method should be used on all branches larger than two inches at the cut. First cut about one-third the way through the underside of the limb (about 6-12 inches from the tree trunk). Then (approximately an inch further out) make a second cut through the limb from the upper side. When the branch is removed, there is no splintering of the main tree trunk. Remove the stub. If the branch is larger than 5-6 inches in diameter, use the four cut system. Cuts 1 and 2 remain the same and cut 3 should be from the underside of the limb, on the outside of the branch collar. Cut 4 should be from the top and in alignment with the 3rd cut. Cut 3 should be 1/4 to 1/3 the way through the limb. This will prevent the bark from peeling down the trunk. Do not paint the cut surface.
- H. Penalties for damage to valuable trees, shrubs, and herbaceous plants should be clearly spelled out in the contract.

#### PROTECTING TREES IN HEAVY USE AREAS

The compaction of soil over the roots of trees and shrubs by the trampling of recreationists, vehicular traffic, etc., reduces oxygen, water, and nutrient uptake by feeder roots. This weakens and may eventually kill the plants. Table 2.6 rates the "Susceptibility of Tree Species to Compaction."

Where heavy compaction is anticipated, apply and maintain a 3 to 4 inch layer of undecayed wood chips or 2 inches of No. 2 washed, crushed gravel. In addition, use of a wooden or plastic mat may be used to lessen compaction, if applicable.

## STANDARD AND SPECIFICATIONS FOR STABILIZED CONSTRUCTION ACCESS



#### **Definition & Scope**

A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of stabilized construction access is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.

#### **Conditions Where Practice Applies**

A stabilized construction access shall be used at all points of construction ingress and egress.

#### **Design Criteria**

See Figure 2.1 on page 2.31 for details.

**Aggregate Size:** Use a matrix of 1-4 inch stone, or reclaimed or recycled concrete equivalent.

**Thickness:** Not less than six (6) inches.

**Width:** 12-foot minimum but not less than the full width of points where ingress or egress occurs. 24-foot minimum if there is only one access to the site.

**Length:** As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).

**Geotextile:** To be placed over the entire area to be covered with aggregate. Filter cloth will not be required on a single-family residence lot. Piping of surface water under entrance shall be provided as required. If piping is impossible, a mountable berm with 5:1 slopes will be permitted.

**Criteria for Geotextile:** The geotextile shall be woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be

inert to commonly encountered chemicals, hydro-carbons, mildew, rot resistant, and conform to the fabric properties as shown:

Fabric Properties <sup>3</sup>	Light Duty <sup>1</sup> Roads Grade Subgrade	Heavy Duty <sup>2</sup> Haul Roads Rough Graded	Test Meth- od
Grab Tensile Strength (lbs)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Burst Strength (lbs)	190	430	ASTM D3786
Puncture Strength (lbs)	40	125	ASTM D751 Modified
Equivalent	40-80	40-80	US Std Sieve
Opening Size			CW-02215
Aggregate Depth	6	10	-

<sup>1</sup>Light Duty Road: Area sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multi-axle truck. Acceptable materials are Trevira Spunbond 1115, Mirafi 100X, Typar 3401, or equivalent.

<sup>2</sup>Heavy Duty Road: Area sites with only rough grading, and where most travel would be multi-axle vehicles. Acceptable materials are Trevira Spunbond 1135, Mirafi 600X, or equivalent.

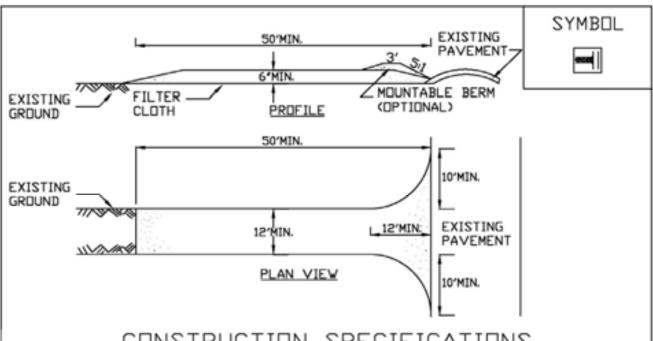
<sup>3</sup>Fabrics not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

#### **Maintenance**

The access shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be removed immediately.

When necessary, wheels must be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device. All sediment shall be prevented from entering storm drains, ditches, or watercourses.

Figure 2.1
Stabilized Construction Access



- CONSTRUCTION SPECIFICATIONS
- EQUIVALENT.

  2. LENGTH NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A

STONE SIZE - USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE.

- 30 FOOT MINIMUM LENGTH WOULD APPLY).

  3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- WIDTH TVELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- 5. GEDTEXTILE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON-STRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5-1 SLOPES WILL BE PERMITTED.
- 7. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE STABILIZED CONSTRUCTION ACCESS

## STANDARD AND SPECIFICATIONS FOR WINTER STABILIZATION



#### **Definition & Scope**

A temporary site specific, enhanced erosion and sediment control plan to manage runoff and sediment at the site during construction activities in the winter months to protect off-site water resources.

#### **Conditions Where Practice Applies**

This standard applies to all construction activities involved with ongoing land disturbance and exposure between November 15<sup>th</sup> to the following April 1<sup>st</sup>.

#### **Design Criteria**

- Prepare a snow management plan with adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.
- Enlarge and stabilize access points to provide for snow management and stockpiling. Snow management activities must not destroy or degrade installed erosion and sediment control practices.
- 3. A minimum 25 foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence with tall stakes that are visible above the snow pack.
- 4. Edges of disturbed areas that drain to a waterbody within 100 feet will have 2 rows of silt fence, 5 feet apart, installed on the contour.
- Drainage structures must be kept open and free of snow and ice dams. All debris, ice dams, or debris from plowing operations, that restrict the flow of runoff and meltwater, shall be removed.
- 6. Sediment barriers must be installed at all appropriate

- perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.
- 7. Soil stockpiles must be protected by the use of established vegetation, anchored straw mulch, rolled stabilization matting, or other durable covering. A barrier must be installed at least 15 feet from the toe of the stockpile to prevent soil migration and to capture loose soil.
- 8. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures should be initiated by the end of the next business day and completed within three (3) days. Rolled erosion control blankets must be used on all slopes 3 horizontal to 1 vertical or steeper.
- 9. If straw mulch alone is used for temporary stabilization, it shall be applied at double the standard rate of 2 tons per acre, making the application rate 4 tons per acre. Other manufactured mulches should be applied at double the manufacturer's recommended rate.
- 10. To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil should be stabilized at the end of each work day unless:
  - a. work will resume within 24 hours in the same area and no precipitation is forecast or;
  - the work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations, or water management areas.
- 11. Use stone paths to stabilize access perimeters of buildings under construction and areas where construction vehicle traffic is anticipated. Stone paths should be a minimum 10 feet in width but wider as necessary to accommodate equipment.

#### Maintenance

The site shall be inspected frequently to ensure that the erosion and sediment control plan is performing its winter stabilization function. If the site will not have earth disturbing activities ongoing during the "winter season", all bare exposed soil must be stabilized by established vegetation, straw or other acceptable mulch, matting, rock, or other approved material such as rolled erosion control products. Seeding of areas with mulch cover is preferred but seeding alone is not acceptable for proper stabilization.

Compliance inspections must be performed and reports filed properly in accordance with the SWPPP for all sites under a winter shutdown.

# STANDARD AND SPECIFICATIONS FOR LANDGRADING



### **Definition & Scope**

**Permanent** reshaping of the existing land surface by grading in accordance with an engineering topographic plan and specification to provide for erosion control and vegetative establishment on disturbed, reshaped areas.

### **Design Criteria**

The grading plan should be based upon the incorporation of building designs and street layouts that fit and utilize existing topography and desirable natural surrounding to avoid extreme grade modifications. Information submitted must provide sufficient topographic surveys and soil investigations to determine limitations that must be imposed on the grading operation related to slope stability, effect on adjacent properties and drainage patterns, measures for drainage and water removal, and vegetative treatment, etc.

Many municipalities and counties have regulations and design procedures already established for land grading and cut and fill slopes. Where these requirements exist, they shall be followed.

The plan must show existing and proposed contours of the area(s) to be graded. The plan shall also include practices for erosion control, slope stabilization, safe disposal of runoff water and drainage, such as waterways, lined ditches, reverse slope benches (include grade and cross section), grade stabilization structures, retaining walls, and surface and subsurface drains. The plan shall also include phasing of these practices. The following shall be incorporated into the plan:

 Provisions shall be made to safely convey surface runoff to storm drains, protected outlets, or to stable water courses to ensure that surface runoff will not

- damage slopes or other graded areas; see standards and specifications for Grassed Waterway, Diversion, or Grade Stabilization Structure.
- 2. Cut and fill slopes that are to be stabilized with grasses shall not be steeper than 2:1. When slopes exceed 2:1, special design and stabilization consideration are required and shall be adequately shown on the plans. (Note: Where the slope is to be mowed, the slope should be no steeper than 3:1, although 4:1 is preferred because of safety factors related to mowing steep slopes.)
- 3. Reverse slope benches or diversion shall be provided whenever the vertical interval (height) of any 2:1 slope exceeds 20 feet; for 3:1 slope it shall be increased to 30 feet and for 4:1 to 40 feet. Benches shall be located to divide the slope face as equally as possible and shall convey the water to a stable outlet. Soils, seeps, rock outcrops, etc., shall also be taken into consideration when designing benches.
  - A. Benches shall be a minimum of six feet wide to provide for ease of maintenance.
  - B. Benches shall be designed with a reverse slope of 6:1 or flatter to the toe of the upper slope and with a minimum of one foot in depth. Bench gradient to the outlet shall be between 2 percent and 3 percent, unless accompanied by appropriate design and computations.
  - C. The flow length within a bench shall not exceed 800 feet unless accompanied by appropriate design and computations; see Standard and Specifications for Diversion on page 3.9
- 4. Surface water shall be diverted from the face of all cut and/or fill slopes by the use of diversions, ditches and swales or conveyed downslope by the use of a designed structure, except where:
  - A. The face of the slope is or shall be stabilized and the face of all graded slopes shall be protected from surface runoff until they are stabilized.
  - B. The face of the slope shall not be subject to any concentrated flows of surface water such as from natural drainage ways, graded ditches, downspouts, etc.
  - C. The face of the slope will be protected by anchored stabilization matting, sod, gravel, riprap, or other stabilization method.

- 5. Cut slopes occurring in ripable rock shall be serrated as shown in Figure 4.9 on page 4.26. The serrations shall be made with conventional equipment as the excavation is made. Each step or serration shall be constructed on the contour and will have steps cut at nominal two-foot intervals with nominal three-foot horizontal shelves. These steps will vary depending on the slope ratio or the cut slope. The nominal slope line is 1 ½: 1. These steps will weather and act to hold moisture, lime, fertilizer, and seed thus producing a much quicker and longer-lived vegetative cover and better slope stabilization. Overland flow shall be diverted from the top of all serrated cut slopes and carried to a suitable outlet.
- Subsurface drainage shall be provided where necessary to intercept seepage that would otherwise adversely affect slope stability or create excessively wet site conditions.
- Slopes shall not be created so close to property lines as
  to endanger adjoining properties without adequately
  protecting such properties against sedimentation,
  erosion, slippage, settlement, subsidence, or other
  related damages.
- 8. Fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris, and other objectionable material. It should be free of stones over two (2) inches in diameter where compacted by hand or mechanical tampers or over eight (8) inches in diameter where compacted by rollers or other equipment. Frozen material shall not be placed in the fill nor shall the fill material be placed on a frozen foundation.
- 9. Stockpiles, borrow areas, and spoil shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.
- All disturbed areas shall be stabilized structurally or vegetatively in compliance with the Permanent Construction Area Planting Standard on page 4.42.

### **Construction Specifications**

See Figures 4.9 and 4.10 for details.

- All graded or disturbed areas, including slopes, shall be protected during clearing and construction in accordance with the erosion and sediment control plan until they are adequately stabilized.
- 2. All erosion and sediment control practices and measures shall be constructed, applied and maintained in accordance with the erosion and sediment control plan and these standards.
- Topsoil required for the establishment of vegetation shall be stockpiled in amount necessary to complete finished grading of all exposed areas.

- 4. Areas to be filled shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots, or other objectionable material.
- 5. Areas that are to be topsoiled shall be scarified to a minimum depth of four inches prior to placement of topsoil.
- 6. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence, or other related problems. Fill intended to support buildings, structures, and conduits, etc., shall be compacted in accordance with local requirements or codes.
- 7. All fill shall be placed and compacted in layers not to exceed 9 inches in thickness.
- Except for approved landfills or nonstructural fills, fill
  material shall be free of frozen particles, brush, roots,
  sod, or other foreign objectionable materials that would
  interfere with, or prevent, construction of satisfactory
  fills.
- 9. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills.
- 10. Fill shall not be placed on saturated or frozen surfaces.
- 11. All benches shall be kept free of sediment during all phases of development.
- 12. Seeps or springs encountered during construction shall be handled in accordance with the Standard and Specification for Subsurface Drain on page 3.48 or other approved methods.
- 13. All graded areas shall be permanently stabilized immediately following finished grading.
- 14. Stockpiles, borrow areas, and spoil areas shall be shown on the plans and shall be subject to the provisions of this Standard and Specifications.



Figure 4.9
Typical Section of Serrated Cut Slope

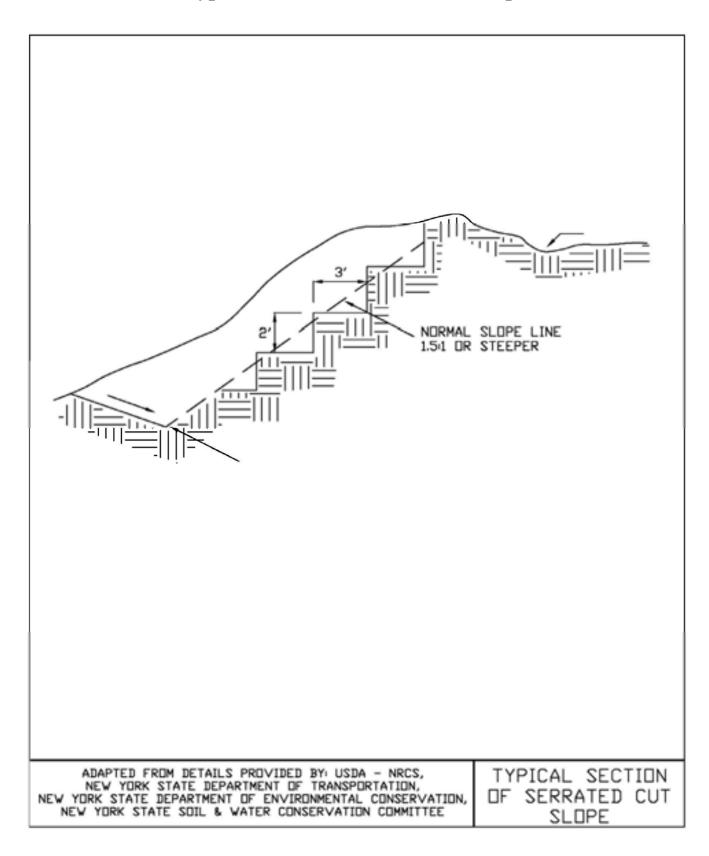
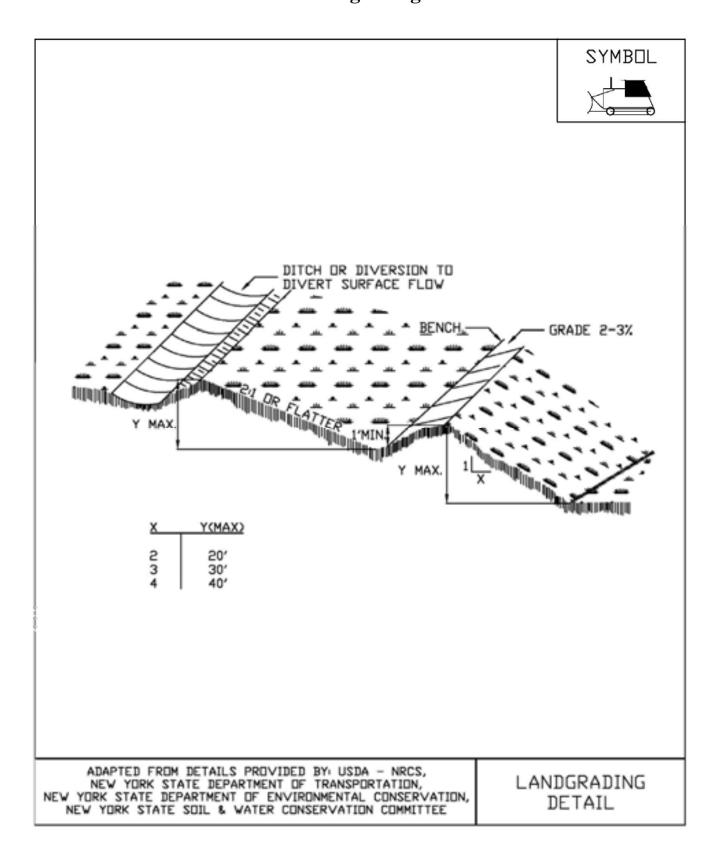


Figure 4.10 Landgrading



# Figure 4.11 Landgrading - Construction Specifications

### CONSTRUCTION SPECIFICATIONS

- ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
- ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
- AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
- 6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, RODTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
- 14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

LANDGRADING SPECIFICATIONS

# STANDARD AND SPECIFICATIONS FOR MULCHING



**Definition and Scope** 

Applying coarse plant residue or chips, or other suitable materials, to cover the soil surface to provide initial erosion control while a seeding or shrub planting is establishing. Mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both. Mulch will prevent soil surface crusting and aid in weed control. Mulch can also be used alone for temporary stabilization in nongrowing months. Use of stone as a mulch could be more permanent and should not be limited to non-growing months.

### **Conditions Where Practice Applies**

On soils subject to erosion and on new seedings and shrub plantings. Mulch is useful on soils with low infiltration rates by retarding runoff.

### **Criteria**

Site preparation prior to mulching requires the installation of necessary erosion control or water management practices and drainage systems.

Slope, grade and smooth the site to fit needs of selected mulch products.

Remove all undesirable stones and other debris to meet the needs of the anticipated land use and maintenance required.

Apply mulch after soil amendments and planting is accomplished or simultaneously if hydroseeding is used.

Select appropriate mulch material and application rate or material needs. Hay mulch shall not be used in wetlands or in areas of permanent seeding. Clean straw mulch is preferred alternative in wetland application. Determine local availability.

Select appropriate mulch anchoring material.

NOTE: The best combination for grass/legume establishment is straw (cereal grain) mulch applied at 2 ton/acre (90 lbs./1000sq.ft.) and anchored with wood fiber mulch (hydromulch) at 500-750 lbs./acre (11 -17 lbs./1000 sq. ft.). The wood fiber mulch must be applied through a hydroseeder immediately after mulching.



Table 4.2 Guide to Mulch Materials, Rates, and Uses

Mulch Material	Quality Standards	per 1000 Sq. Ft.	per Acre	Depth of Application	Remarks
Wood chips or shavings	Air-dried. Free of objectionable coarse material	500-900 lbs.	10-20 tons	2-7"	Used primarily around shrub and tree plantings and recreation trails to inhibit weed competition. Resistant to wind blowing. Decomposes slowly.
Wood fiber cellulose (partly digested wood fibers)	Made from natural wood usually with green dye and dispersing agent	50 lbs.	2,000 lbs.		Apply with hydromulcher. No tie down required. Less erosion control provided than 2 tons of hay or straw.
Gravel, Crushed Stone or Slag	Washed; Size 2B or 3A—1 1/2"	9 cu. yds.	405 cu. yds.	3"	Excellent mulch for short slopes and around plants and ornamentals. Use 2B where subject to traffic. (Approximately 2,000 lbs./cu. yd.). Frequently used over filter fabric for better weed control.
Hay or Straw	Air-dried; free of undesirable seeds & coarse materials	90-100 lbs. 2-3 bales	2 tons (100- 120 bales)	cover about 90% surface	Use small grain straw where mulch is maintained for more than three months. Subject to wind blowing unless anchored. Most commonly used mulching material. Provides the best micro-environment for germinating seeds.
Jute twisted yarn	Undyed, unbleached plain weave. Warp 78 ends/yd., Weft 41 ends/ yd. 60-90 lbs./roll	48" x 50 yds. or 48" x 75 yds.			Use without additional mulch. Tie down as per manufacturers specifications. Good for center line of concentrated water flow.
Excelsior wood fiber mats	Interlocking web of excelsior fibers with photodegradable plastic netting	4' x 112.5' or 8' x 112.5'.			Use without additional mulch. Excellent for seeding establishment. Anchor as per manufacturers specifications. Approximately 72 lbs./roll for excelsior with plastic on both sides. Use two sided plastic for centerline of waterways.
Straw or coconut fiber, or combination	Photodegradable plastic net on one or two sides	Most are 6.5 ft. x 3.5 ft.	81 rolls		Designed to tolerate higher velocity water flow, centerlines of waterways, 60 sq. yds. per roll.

### Table 4.3 Mulch Anchoring Guide

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
1. Peg and Twine	Hay or straw	After mulching, divide areas into blocks approximately 1 sq. yd. in size. Drive 4-6 pegs per block to within 2" to 3" of soil surface. Secure mulch to surface by stretching twine between pegs in criss-cross pattern on each block. Secure twine around each peg with 2 or more tight turns. Drive pegs flush with soil. Driving stakes into ground tightens the twine.
2. Mulch netting	Hay or straw	Staple the light-weight paper, jute, wood fiber, or plastic nettings to soil surface according to manufacturer's recommendations. Should be biodegradable. Most products are not suitable for foot traffic.
3. Wood cellulose fiber	Hay or straw	Apply with hydroseeder immediately after mulching. Use 500 lbs. wood fiber per acre. Some products contain an adhesive material ("tackifier"), possibly advantageous.
4. Mulch anchoring tool	Hay or straw	Apply mulch and pull a mulch anchoring tool (blunt, straight discs) over mulch as near to the contour as possible. Mulch material should be "tucked" into soil surface about 3".
5. Tackifier	Hay or straw	Mix and apply polymeric and gum tackifiers according to manufacturer's instructions. Avoid application during rain. A 24-hour curing period and a soil temperature higher than 45 <sup>0</sup> Fahrenheit are required.

# STANDARD AND SPECIFICATIONS FOR SOIL RESTORATION



### **Definition & Scope**

The decompaction of areas of a development site or construction project where soils have been disturbed to recover the original properties and porosity of the soil; thus providing a sustainable growth medium for vegetation, reduction of runoff and filtering of pollutants from stormwater runoff.

### **Conditions Where Practice Applies**

Soil restoration is to be applied to areas whose heavy construction traffic is done and final stabilization is to begin. This is generally applied in the cleanup, site restoration, and landscaping phase of construction followed by the permanent establishment of an appropriate ground cover to maintain the soil structure. Soil restoration measures should be applied over and adjacent to any runoff reduction practices to achieve design performance.



### **Design Criteria**

1. Soil restoration areas will be designated on the plan views of areas to be disturbed.

2. Soil restoration will be completed in accordance with Table 4.6 on page 4.53.

### **Specification for Full Soil Restoration**

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following Soil Restoration steps applied:

Apply 3 inches of compost over subsoil. The compost shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of man-made foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 - Compost Standards Table, except for "Particle Size" 100% will pass the 1/2" sieve. Note: All biosolids compost produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part **360 (Solid Waste Management Facilities)** requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metals content.



- 2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor mounted disc, or tiller, to mix and circulate air and compost into the subsoil.
- 3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site.
- 4. Apply topsoil to a depth of 6 inches.
- 5. Vegetate as required by the seeding plan. Use appropriate ground cover with deep roots to maintain the soil structure.
- 6. Topsoil may be manufactured as a mixture or a mineral component and organic material such as compost.

At the end of the project an inspector should be able to push a 3/8" metal bar 12 inches into the soil just with body weight. This should not be performed within the drip line of any existing trees or over utility installations that are within 24 inches of the surface.

### **Maintenance**

Keep the site free of vehicular and foot traffic or other weight loads. Consider pedestrian footpaths.

Table 4.6 Soil Restoration Requirements

Type of Soil Disturbance	Soil Restoration	on Requirement	Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required (		Clearing and grubbing
A second second second second second	HSG A&B	HSG C&D	Danta et aus fue a sur a si a sur a sur a si a sur a s
Areas where topsoil is stripped only - no change in grade	Apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	Protect area from any ongoing construction activities.
	HSG A&B HSG C&D		
Areas of cut or fill	Aerate* and apply 6 inches of topsoil Restoration**		
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment projects	Soil Restoration is required on redevel- opment projects in areas where existing impervious area will be converted to pervious area.		

<sup>\*</sup> Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.

\*\* Per "Deep Ripping and De-compaction, DEC 2008".

# STANDARD AND SPECIFICATIONS FOR STABILIZATION WITH SOD



### **Definition & Scope**

Stabilizing restored, exposed soil surfaces by establishing long term stands of grass with sod to reduce damage from sediment and runoff to downstream areas and enhance natural beauty.

### **Conditions Where Practice Applies**

On exposed soils that have a potential for causing off site environmental damage where a quick vegetative cover is desired. Moisture, either applied or natural, is essential to success.

### **Design Criteria**

- Sod shall be bluegrass or a bluegrass/red fescue mixture or a perennial ryegrass for average sites. (CAUTION: Perennial ryegrass has limited cold tolerance and may winter kill.) Use turf type cultivars of tall fescue for shady, droughty, or otherwise more critical areas. For variety selection, contact Cornell Cooperative Extension Turf Specialist.
- 2. Sod shall be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch. Measurement for thickness shall exclude top growth and thatch.
- 3. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically from a firm grasp on the upper 10 percent of the section.
- 4. Sod shall be free of weeds and undesirable coarse weedy grasses. Wild native or pasture grass sod shall not be used unless specified.
- 5. Sod shall not be harvested or transplanted when

- moisture content (excessively dry or wet) may adversely affect its survival.
- 6. Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period shall be inspected and approved by the contracting officer or his designated representative prior to its installation.

### **Site Preparation**

Fertilizer and lime application rates shall be determined by soil tests. Under unusual circumstances where there is insufficient time for a complete soil test and the contracting officer agrees, fertilizer and lime materials may be applied in amounts shown in subsection 2 below. Slope land such as to provide good surface water drainage. Avoid depressions or pockets.

- 1. Prior to sodding, the surface shall be smoothed and cleared of all trash, debris, and of all roots, brush, wire, grade stakes and other objects that would interfere with planting, fertilizing or maintenance operations.
- 2. The soil should be tested to determine the amounts of amendments needed. Where the soil is acid or composed of heavy clays, ground limestone shall be spread to raise the pH to 6.5. If the soil must be fertilized before results of a soil test can be obtained to determine fertilizer needs, apply commercial fertilizer at 20 lbs. of 5-5-10 (or equivalent) and mix into the top 3 inches of soil with the required lime for every 1,000 square feet. Soil should be moist prior to sodding. Arrange for temporary storage of sod to keep it shaded and cool.

#### **Sod Installation**

- For the operation of laying, tamping, and irrigating for any areas, sod shall be completed within eight hours. During periods of excessively high temperature, the soil shall be lightly moistened immediately prior to laying the sod.
- 2. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to, and tightly wedged against, each other. Lateral joints shall be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots. On sloping areas where erosion may be a problem, sod shall be laid with the long edges parallel to the contour and with

- staggered joints.
- 3. Secure the sod by tamping and pegging, or other approved methods. As sodding is completed in any one section, the entire area shall be rolled or tamped to ensure solid contact of roots with the soil surface.
- Sod shall be watered immediately after rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Keep sod moist for at least two weeks.

#### **Sod Maintenance**

- 1. In the absence of adequate rainfall, watering shall be performed daily, or as often as deemed necessary by the inspector, during the first week and in sufficient quantities to maintain moist soil to a depth of 4 inches. Watering should be done in the morning. Avoid excessive watering during applications.
- 2. After the first week, sod shall be watered as necessary to maintain adequate moisture and ensure establishment.
- 3. The first mowing should not be attempted until sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2 and 3 inches unless otherwise specified. Avoid heavy mowing equipment for several weeks to prevent rutting.
- 4. If the soil must be fertilized before results of a soil test can be obtained to determine fertilizer needs, apply fertilizer three to four weeks after sodding, at a rate of 1 pound nitrogen/1,000 sq.ft. Use a complete fertilizer with a 2-1-1 ratio.
- 5. Weed Control: Target herbicides for weeds present. Consult current Cornell Pest Control Recommendations for Commercial Turfgrass Management or consult the local office of Cornell Cooperative Extension.
- 6. Disease Control: Consult the local office of the Cornell Cooperative Extension.

#### **Additional References**

- 1. Home Lawns, Establishment and Maintenance, CCE Information Bulletin 185, Revised November 1994. Cornell University, Ithaca, NY.
- 2. Installing a Sod Lawn. CCE Suffolk County, NY. Thomas Kowalsick February 1994, Revised January 1999. www.cce.cornell.edu/counties/suffolk/grownet

# STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING



### **Definition & Scope**

Providing temporary erosion control protection to disturbed areas and/or localized critical areas for an interim period by covering all bare ground that exists as a result of construction activities or a natural event. Critical areas may include but are not limited to steep excavated cut or fill slopes and any disturbed, denuded natural slopes subject to erosion.

### **Conditions Where Practice Applies**

Temporary seedings may be necessary on construction sites to protect an area, or section, where final grading is complete, when preparing for winter work shutdown, or to provide cover when permanent seedings are likely to fail due to mid-summer heat and drought. The intent is to provide temporary protective cover during temporary shutdown of construction and/or while waiting for optimal planting time.

### **Criteria**

Water management practices must be installed as appropriate for site conditions. The area must be rough graded and slopes physically stable. Large debris and rocks are usually removed. Seedbed must be seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding.

Fertilizer or lime are not typically used for temporary seedings.

IF: Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or use 1 lb./1000 sq. ft.).

IF: Late fall or early winter, then seed Certified 'Aroostook' winter rye (cereal rye) at 100 lbs. per acre (2.5 lbs./1000 sq. ft.).

Any seeding method may be used that will provide uniform application of seed to the area and result in relatively good soil to seed contact.

Mulch the area with hay or straw at 2 tons/acre (approx. 90 lbs./1000 sq. ft. or 2 bales). Quality of hay or straw mulch allowable will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or areas of concentrated water are of concern. Wood fiber hydromulch or other sprayable products approved for erosion control (nylon web or mesh) may be used if applied according to manufacturers' specification. Caution is advised when using nylon or other synthetic products. They may be difficult to remove prior to final seeding and can be a hazard to young wildlife species.

# STANDARD AND SPECIFICATIONS FOR TOPSOILING



### **Definition & Scope**

Spreading a specified quality and quantity of topsoil materials on graded or constructed subsoil areas to provide acceptable plant cover growing conditions, thereby reducing erosion; to reduce irrigation water needs; and to reduce the need for nitrogen fertilizer application.

### **Conditions Where Practice Applies**

Topsoil is applied to subsoils that are droughty (low available moisture for plants), stony, slowly permeable, salty or extremely acid. It is also used to backfill around shrub and tree transplants. This standard does not apply to wetland soils.

#### **Design Criteria**

- 1. Preserve existing topsoil in place where possible, thereby reducing the need for added topsoil.
- 2. Conserve by stockpiling topsoil and friable fine textured subsoils that must be stripped from the excavated site and applied after final grading where vegetation will be established. Topsoil stockpiles must be stabilized. Stockpile surfaces can be stabilized by vegetation, geotextile or plastic covers. This can be aided by orientating the stockpile lengthwise into prevailing winds.
- Refer to USDA Natural Resource Conservation Service soil surveys or soil interpretation record sheets for further soil texture information for selecting appropriate design topsoil depths.

#### **Site Preparation**

- As needed, install erosion and sediment control practices such as diversions, channels, sediment traps, and stabilizing measures, or maintain if already installed.
- 2. Complete rough grading and final grade, allowing for depth of topsoil to be added.
- Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in soil areas that are steeper than 5 percent. Areas that have been overly compacted shall be decompacted in accordance with the Soil Restoration Standard.
- 4. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.

#### **Topsoil Materials**

- 1. Topsoil shall have at least 6 percent by weight of fine textured stable organic material, and no greater than 20 percent. Muck soil shall not be considered topsoil.
- 2. Topsoil shall have not less than 20 percent fine textured material (passing the NO. 200 sieve) and not more than 15 percent clay.
- 3. Topsoil treated with soil sterilants or herbicides shall be so identified to the purchaser.
- 4. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter, trash, noxious weeds such as nut sedge and quackgrass, and will have less than 10 percent gravel.
- 5. Topsoil containing soluble salts greater than 500 parts per million shall not be used.
- 6. Topsoil may be manufactured as a mixture of a mineral component and organic material such as compost.

#### **Application and Grading**

- 1. Topsoil shall be distributed to a uniform depth over the area. It shall not be placed when it is partly frozen, muddy, or on frozen slopes or over ice, snow, or standing water puddles.
- 2. Topsoil placed and graded on slopes steeper than 5 percent shall be promptly fertilized, seeded, mulched, and stabilized by "tracking" with suitable equipment.
- 3. Apply topsoil in the amounts shown in Table 4.7 below:

Table 4.7 - Topsoil Application Depth				
Site Conditions	Intended Use	Minimum Topsoil Depth		
1. Deep sand or	Mowed lawn	6 in.		
loamy sand	Tall legumes, unmowed	2 in.		
	Tall grass, unmowed	1 in.		
2. Deep sandy	Mowed lawn	5 in.		
loam	Tall legumes, unmowed	2 in.		
	Tall grass, unmowed	none		
3. Six inches or	Mowed lawn	4 in.		
more: silt loam, clay loam, loam,	Tall legumes, unmowed	1 in.		
or silt	Tall grass, unmowed	1 in.		

# STANDARD AND SPECIFICATIONS FOR COMPOST FILTER SOCK



### **Definition & Scope**

A **temporary** sediment control practice composed of a degradable geotextile mesh tube filled with compost filter media to filter sediment and other pollutants associated with construction activity to prevent their migration offsite.

### **Condition Where Practice Applies**

Compost filter socks can be used in many construction site applications where erosion will occur in the form of sheet erosion and there is no concentration of water flowing to the sock. In areas with steep slopes and/or rocky terrain, soil conditions must be such that good continuous contact between the sock and the soil is maintained throughout its length. For use on impervious surfaces such as road pavement or parking areas, proper anchorage must be provided to prevent shifting of the sock or separation of the contact between the sock and the pavement. Compost filter socks are utilized both at the site perimeter as well as within the construction areas. These socks may be filled after placement by blowing compost into the tube pneumatically, or filled at a staging location and moved into its designed location.

#### **Design Criteria**

- 1. Compost filter socks will be placed on the contour with both terminal ends of the sock extended 8 feet upslope at a 45 degree angle to prevent bypass flow.
- 2. Diameters designed for use shall be 12" 32" except

- that 8" diameter socks may be used for residential lots to control areas less than 0.25 acres.
- 3. The flat dimension of the sock shall be at least 1.5 times the nominal diameter.
- 4. The **Maximum Slope Length** (in feet) above a compost filter sock shall not exceed the following limits:

Dia (in )	Slope %						
Dia. (in.)	2	5	10	20	25	33	50
8	225*	200	100	50	20		_
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

\* Length in feet



- The compost infill shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of manmade foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 -Compost Standards Table. Note: All biosolids compost produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part 360 (Solid Waste Management Facilities) requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metals content. When using compost filter socks adjacent to surface water, the compost should have a low nutrient value.
- 5. The compost filter sock fabric material shall meet the

- 7. Compost filter socks shall be anchored in earth with 2" x 2" wooden stakes driven 12" into the soil on 10 foot centers on the centerline of the sock. On uneven terrain, effective ground contact can be enhanced by the placement of a fillet of filter media on the disturbed area side of the compost sock.
- All specific construction details and material specifications shall appear on the erosion and sediment control constructions drawings when compost filter socks are included in the plan.

### **Maintenance**

- 1. Traffic shall not be permitted to cross filter socks.
- 2. Accumulated sediment shall be removed when it reaches half the above ground height of the sock and disposed of in accordance with the plan.

- 3. Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired in the manner required by the manufacturer or replaced within 24 hours of inspection notification.
- 4. Biodegradable filter socks shall be replaced after 6 months; photodegradable filter socks after 1 year. Polypropylene socks shall be replaced according to the manufacturer's recommendations.
- 5. Upon stabilization of the area contributory to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed in accordance with the stabilization plan. For removal the mesh can be cut and the compost spread as an additional mulch to act as a soil supplement.

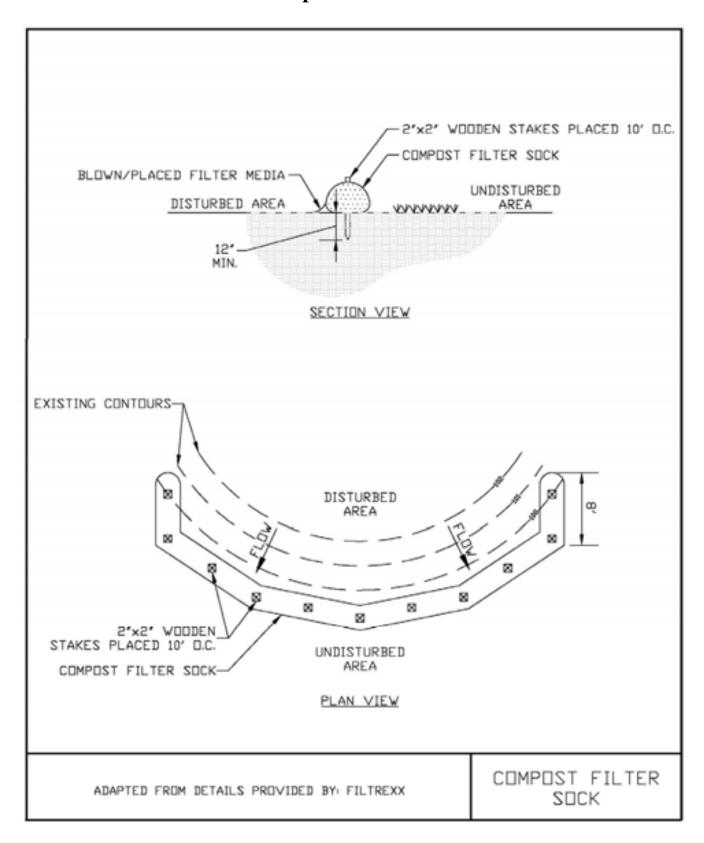
**Table 5.1 - Compost Sock Fabric Minimum Specifications Table** 

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi- Filament Polypropylene (HDMFPP)
Material Character- istics	Photodegrada- ble	Photodegrada- ble	Biodegradable	Photodegrada- ble	Photodegradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

**Table 5.2 - Compost Standards Table** 

Organic matter content	25% - 100% (dry weight)
Organic portion	Fibrous and elongated
рН	6.0 - 8.0
Moisture content	30% - 60%
Particle size	100% passing a 1" screen and 10 - 50% passing a 3/8" screen
Soluble salt concentration	5.0 dS/m (mmhos/cm) maximum

Figure 5.2 Compost Filter Sock



# STANDARD AND SPECIFICATIONS FOR SILT FENCE



### **Definition & Scope**

A **temporary** barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil by temporarily ponding the sediment laden runoff allowing settling to occur. The maximum period of use is limited by the ultraviolet stability of the fabric (approximately one year).

### **Conditions Where Practice Applies**

A silt fence may be used subject to the following conditions:

- Maximum allowable slope length and fence length will not exceed the limits shown in the Design Criteria for the specific type of silt fence used; and
- Maximum ponding depth of 1.5 feet behind the fence; and
- 3. Erosion would occur in the form of sheet erosion; and
- 4. There is no concentration of water flowing to the barrier; and
- 5. Soil conditions allow for proper keying of fabric, or other anchorage, to prevent blowouts.

#### **Design Criteria**

- 1. Design computations are not required for installations of 1 month or less. Longer installation periods should be designed for expected runoff.
- 2. All silt fences shall be placed as close to the disturbed area as possible, but at least 10 feet from the toe of a slope steeper than 3H:1V, to allow for maintenance and

- roll down. The area beyond the fence must be undisturbed or stabilized.
- 3. The type of silt fence specified for each location on the plan shall not exceed the maximum slope length and maximum fence length requirements shown in the following table:

		Slope Length/Fence Length (ft.)				
Slope	Steepness	Standard	Reinforced	Super		
<2%	< 50:1	300/1500	N/A	N/A		
2-10%	50:1 to 10:1	125/1000	250/2000	300/2500		
10-20%	10:1 to 5:1	100/750	150/1000	200/1000		
20-33%	5:1 to 3:1	60/500	80/750	100/1000		
33-50%	3:1 to 2:1	40/250	70/350	100/500		
>50%	> 2:1	20/125	30/175	50/250		

**Standard Silt Fence (SF)** is fabric rolls stapled to wooden stakes driven 16 inches in the ground.

**Reinforced Silt Fence (RSF)** is fabric placed against welded wire fabric with anchored steel posts driven 16 inches in the ground.

**Super Silt Fence (SSF)** is fabric placed against chain link fence as support backing with posts driven 3 feet in the ground.

4. Silt fence shall be removed as soon as the disturbed area has achieved final stabilization.

The silt fence shall be installed in accordance with the appropriate details. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Butt joints are not acceptable. A detail of the silt fence shall be shown on the plan. See Figure 5.30 on page 5.56 for Reinforced Silt Fence as an example of details to be provided.

### **Criteria for Silt Fence Materials**

 Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance.

Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	110	ASTM D 4632
Elongation at Failure (%)	20	ASTM D 4632
Mullen Burst Strength (PSI)	300	ASTM D 3786
Puncture Strength (lbs)	60	ASTM D 4833
Minimum Trapezoidal Tear Strength (lbs)	50	ASTM D 4533
Flow Through Rate (gal/min/sf)	25	ASTM D 4491
Equivalent Opening Size	40-80	US Std Sieve ASTM D 4751
Minimum UV Residual (%)	70	ASTM D 4355

- 2. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.5 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot. Posts for super silt fence shall be standard chain link fence posts.
- 3. Wire Fence for reinforced silt fence: Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.
- 4. Prefabricated silt fence is acceptable as long as all material specifications are met.

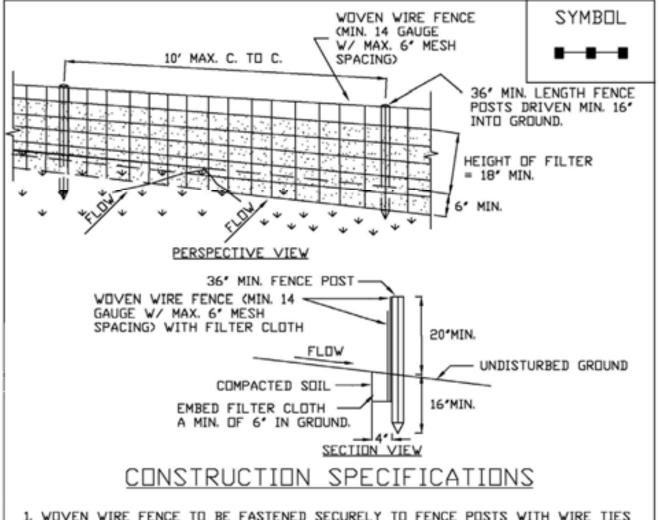
### Reinforced Silt Fence



### Super Silt Fence



### Figure 5.30 Reinforced Silt Fence



- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES, POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24' AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6' MAXIMUM MESH OPENING.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

REINFORCED SILT FENCE

# STANDARD AND SPECIFICATIONS FOR STORM DRAIN INLET PROTECTION



### **Definition & Scope**

A **temporary** barrier with low permeability, installed around inlets in the form of a fence, berm or excavation around an opening, detaining water and thereby reducing the sediment content of sediment laden water by settling thus preventing heavily sediment laden water from entering a storm drain system.

### **Conditions Where Practice Applies**

This practice shall be used where the drainage area to an inlet is disturbed, it is not possible to temporarily divert the storm drain outfall into a trapping device, and watertight blocking of inlets is not advisable. **It is not to be used in place of sediment trapping devices.** This practice shall be used with an upstream buffer strip if placed at a storm drain inlet on a paved surface. It may be used in conjunction with storm drain diversion to help prevent siltation of pipes installed with low slope angle.

#### **Types of Storm Drain Inlet Practices**

There are five (5) specific types of storm drain inlet protection practices that vary according to their function, location, drainage area, and availability of materials:

- I. Excavated Drop Inlet Protection
- II. Fabric Drop Inlet Protection
- III. Stone & Block Drop Inlet Protection
- IV. Paved Surface Inlet Protection
- V. Manufactured Insert Inlet Protection

### **Design Criteria**

Drainage Area – The drainage area for storm drain inlets shall not exceed one acre. Erosion control/temporary stabilization measures must be implemented on the disturbed

drainage area tributary to the inlet. The crest elevations of these practices shall provide storage and minimize bypass flow.

### Type I – Excavated Drop Inlet Protection

This practice is generally used during initial overlot grading after the storm drain trunk line is installed.

Limit the drainage area to the inlet device to 1 acre. Excavated side slopes shall be no steeper than 2:1. The minimum depth shall be 1 foot and the maximum depth 2 feet as measured from the crest of the inlet structure. Shape the excavated basin to fit conditions with the longest dimension oriented toward the longest inflow area to provide maximum trap efficiency. The capacity of the excavated basin should be established to contain 900 cubic feet per acre of disturbed area. Weep holes, protected by fabric and stone, should be provided for draining the temporary pool.

Inspect and clean the excavated basin after every storm. Sediment should be removed when 50 percent of the storage volume is achieved. This material should be incorporated into the site in a stabilized manner.

Type II – Fabric Drop Inlet Protection



This practice is generally used during final elevation grading phases after the storm drain system is completed.

Limit the drainage area to 1 acre per inlet device. Land area slope immediately surrounding this device should not exceed 1 percent. The maximum height of the fabric above the inlet crest shall not exceed 1.5 feet unless reinforced.

The top of the barrier should be maintained to allow overflow to drop into the drop inlet and not bypass the inlet to unprotected lower areas. Support stakes for fabric shall be a minimum of 3 feet long, spaced a maximum 3 feet apart. They should be driven close to the inlet so any overflow drops into the inlet and not on the unprotected soil. Improved performance and sediment storage volume can be obtained by excavating the area.

Inspect the fabric barrier after each rain event and make repairs as needed. Remove sediment from the pool area as necessary with care not to undercut or damage the filter fabric. Upon stabilization of the drainage area, remove all materials and unstable sediment and dispose of properly. Bring the adjacent area of the drop inlet to grade, smooth and compact and stabilize in the appropriate manner to the site

#### Type III - Stone and Block Drop Inlet Protection

This practice is generally used during the initial and intermediate overlot grading of a construction site.

Limit the drainage area to 1 acre at the drop inlet. The stone barrier should have a minimum height of 1 foot and a maximum height of 2 feet. Do not use mortar. The height should be limited to prevent excess ponding and bypass flow.

Recess the first course of blocks at least 2 inches below the crest opening of the storm drain for lateral support. Subsequent courses can be supported laterally if needed by placing a 2x4 inch wood stud through the block openings perpendicular to the course. The bottom row should have a few blocks oriented so flow can drain through the block to dewater the basin area.

The stone should be placed just below the top of the blocks on slopes of 2:1 or flatter. Place hardware cloth of wire mesh with ½ inch openings over all block openings to hold stone in place.

As an optional design, the concrete blocks may be omitted and the entire structure constructed of stone, ringing the outlet ("doughnut"). The stone should be kept at a 3:1 slope toward the inlet to keep it from being washed into the inlet. A level area 1 foot wide and four inches below the crest will further prevent wash. Stone on the slope toward the inlet should be at least 3 inches in size for stability and 1 inch or smaller away from the inlet to control flow rate. The elevation of the top of the stone crest must be maintained 6 inches lower than the ground elevation down slope from the inlet to ensure that all storm flows pass over the stone into the storm drain and not past the structure. Temporary diking should be used as necessary to prevent bypass flow.

The barrier should be inspected after each rain event and repairs made where needed. Remove sediment as necessary to provide for accurate storage volume for subsequent rains. Upon stabilization of contributing drainage area, remove all

materials and any unstable soil and dispose of properly.

Bring the disturbed area to proper grade, smooth, compact and stabilize in a manner appropriate to the site.

Type IV - Paved Surface Inlet Protection



This practice is generally used after pavement construction has been done while final grading and soil stabilization is occurring. These practices should be used with upstream buffer strips in linear construction applications, and with temporary surface stabilization for overlot areas, to reduce the sediment load at the practice. This practice includes sand bags, compost filter socks, geo-tubes filled with ballast, and manufactured surface barriers. Pea gravel can also be used in conjunction with these practices to improve performance. When the inlet is not at a low point, and is offset from the pavement or gutter line, protection should be selected and installed so that flows are not diverted around the inlet.



The drainage area should be limited to 1 acre at the drain inlet. All practices will be placed at the inlet perimeter or beyond to maximize the flow capacity of the inlet. Practices shall be weighted, braced, tied, or otherwise anchored to prevent movement or shifting of location on paved surfaces. Traffic safety shall be integrated with the use of this practice. All practices should be marked with traffic safety cones as appropriate. Structure height shall not cause flooding or by-pass flow that would cause additional erosion.

The structure should be inspected after every storm event. Any sediment should be removed and disposed of on the site. Any broken or damaged components should be replaced. Check all materials for proper anchorage and secure as necessary.

**Type V - Manufactured Insert Inlet Protection** 



The drainage area shall be limited to 1 acre at the drain inlet. All inserts will be installed and anchored in accordance with the manufacturers recommendations and design details. The fabric portion of the structure will equal or exceed the performance standard for the silt fence fabric. The inserts will be installed to preserve a minimum of 50 percent of the open, unobstructed design flow area of the storm drain inlet opening to maintain capacity for storm events.

Figure 5.31 Excavated Drop Inlet Protection

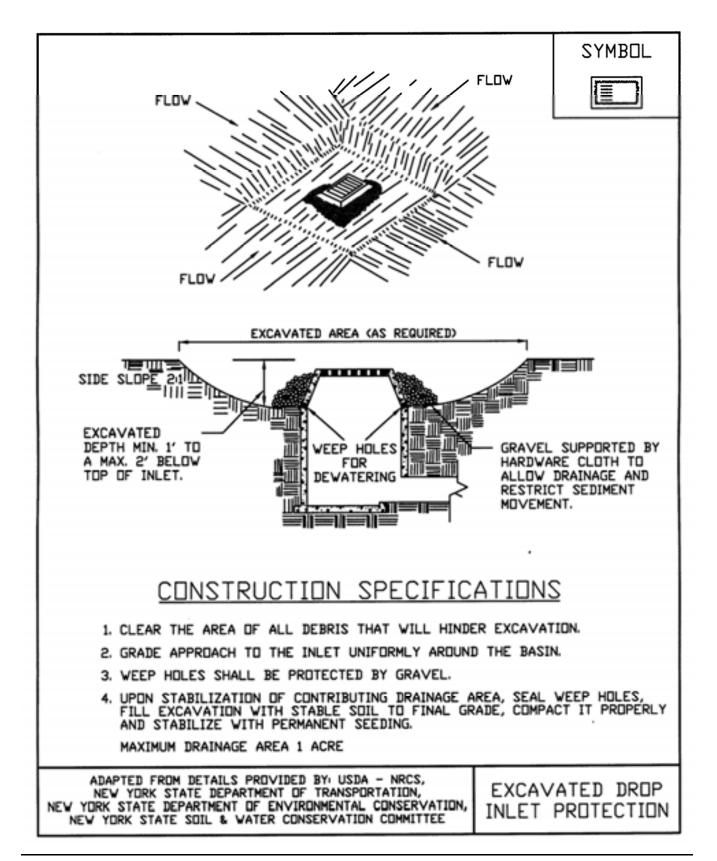


Figure 5.32
Fabric Drop Inlet Protection

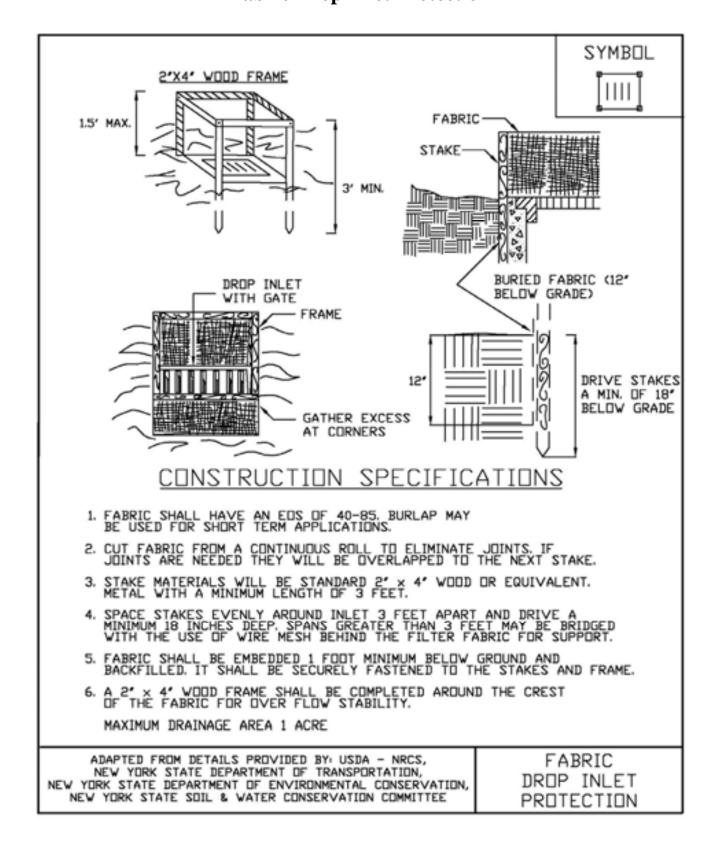
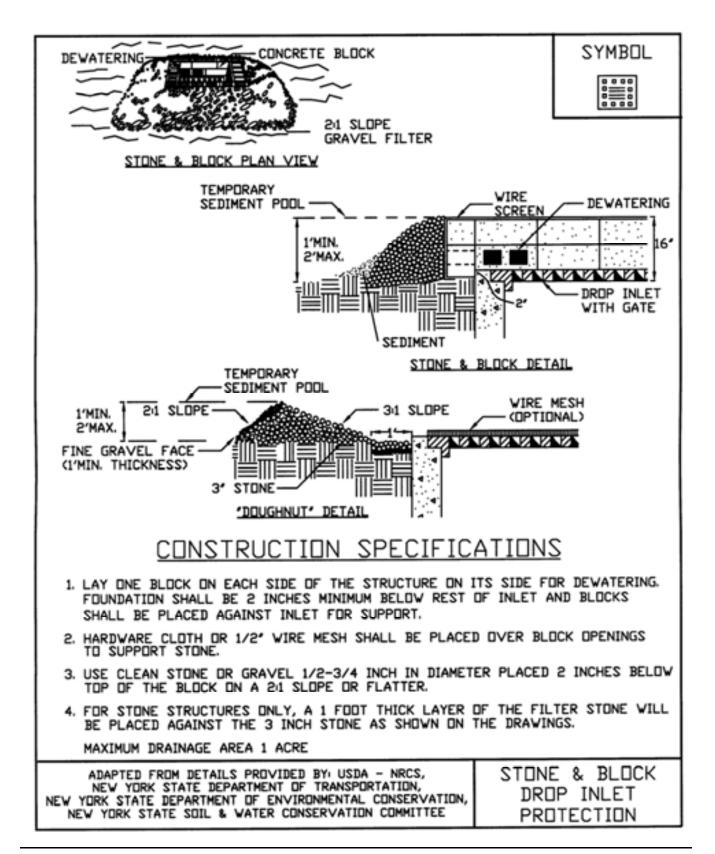


Figure 5.33
Stone & Block Drop Inlet Protection



# STANDARD AND SPECIFICATIONS FOR STRAW BALE DIKE



quarter of an acre per 100 feet of dike and the length of slope above the dike shall be less than 100 feet.

### **Design Criteria**

The above table is adequate, in general, for a one-inch rainfall event. Larger storms could cause failure of this practice. Use of this practice in sensitive areas for longer than one month should be specifically designed to store expected runoff. All bales shall be placed on the contour with cut edge of bale adhering to the ground. See Figure 5.34 on page 5.64 for details.

### **Definition & Scope**

A **temporary** barrier of straw, or similar material, used to intercept sediment laden runoff from small drainage areas of disturbed soil to reduce runoff velocity and effect deposition of the transported sediment load. Straw bale dikes have an estimated design life of three (3) months.

### **Condition Where Practice Applies**

The straw bale dike is used where:

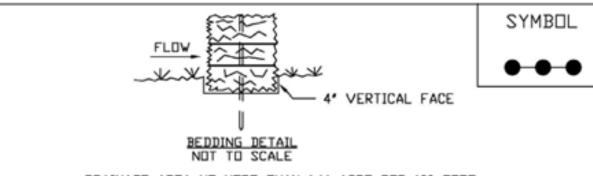
- 1. No other practice is feasible.
- 2. There is no concentration of water in a channel or other drainageway above the barrier.
- 3. Erosion would occur in the form of sheet erosion.
- 4. Length of slope above the straw bale dike does not exceed the following limits with the bale placed 10 feet from the toe of the slope:

Constructed Slope	Percent Slope	Slope Length (ft.)
2:1	50	25
3:1	33	50
4:1	25	75

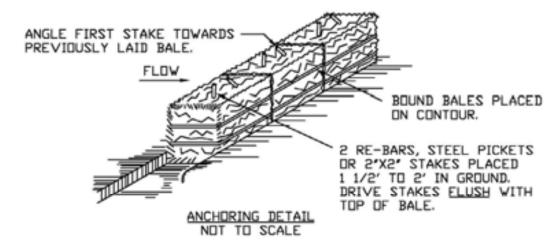
Where slope gradient changes through the drainage area, steepness refers to the steepest slope section contributing to the straw bale dike.

The practice may also be used for a single family lot if the slope is less than 15 percent. The contributing drainage areas in this instance shall be less than one

### Figure 5.34 Straw Bale Dike



DRAINAGE AREA NO MORE THAN 1/4 ACRE PER 100 FEET OF STRAW BALE DIKE FOR SLOPES LESS THAN 25%.



### CONSTRUCTION SPECIFICATIONS

- BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULLNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STRAW BALE DIKE

### **APPENDIX 8**

Construction Oversight Program Plan (In Progress)

### Village of Islandia

### **Construction Sites Inventory**

No.	Program ID	Facility Name	Address	Construction Termination	Final Stabilization Date
1		Village of Islandia- First Responder's Memorial Recreation Field, Parking Lot	1127 Old Nichols Road	Yes	
2		Creation RE, LLC/ Commerce Center	3795 Express Drive North	Yes	
3		Lakeland Woods	Johnson Avenue	No	
4		Breslin Plaza/ Islandia Jaz, LLC	1900 Veterans Memorial Highway	No	
5		ONYX/ Islandia Property Owner, LLC	1 Computer Associates Plaza	No	
6		Jake's 58 Casino	3635 Express Drive North	No	
7		Prim-Rose Villas	726 Old Nichols Road	No	
8		Polo Club/ Preserve at Islandia	1239 Old Nichols Road	No	
9		Islandia Shopping Center - Pad Sites	1750 Veterans Memorial Highway	No	

### APPENDIX E EROSION AND SEDIMENT CONTROL PLAN REVIEW CHECKLIST

Project Name	Site Location				
Applicant's Name & Address					
General					
A narrative statement shall be provided including topography, vegetation and of the site and key properties; notations of quencing and stabilization plan; total d	drainage; adjacent and off-site areas af f critical areas such as steep slopes, ch	fected by to nannels or v	the project; owetlands; the	lescription of t e overall phasi	the soils on
I. <u>Construction Drawings</u>					
Are the following items shown on	the construction drawings:	<u>Yes</u>	<u>No</u>		
1. Vicinity Map with scale and not	rth arrow				
2. Legend, scales, N arrow on plar	ı view				
3. Existing and proposed topograp with contours labeled with spots e					
4. Scope of the plan noted in the T	itle Block				
5. Limits of clearing and grading s	shown, and methods of spoil disposal				
6. Existing vegetation delineated					
7. Soil boundaries shown on the ex	xisting and proposed plan views				
8. Existing drainage patterns, 100 and sub-areas shown, runoff outfain					
9. Existing and proposed developments shown	nent facilities/				
10. Location of Erosion and Sedin with construction, with dimension					
11. Phasing plan with 5 acre thresh	nold limits shown				
12. Stockpile locations, staging are points, and concrete trunk washou					
13. Street profiles, utility locations and, easement delineations shown	s, property boundaries				
14. Soil Restoration Plan detailed	on the site plan				

II.	Construction Notes & Details	<u>Yes</u>	<u>No</u>
	1. Specific sequence of operation given for each phase		
	2. Inspection and maintenance schedule shown for the specific practices		
	3. Design details show all dimensions and installation details necessary for construction		
	4. Implementation schedule for E&S practices is provided with removal criteria stated		
	5. Site pollution and construction waste management plan incorporated in the notes		
	6. Site Inspections during construction are noted on the drawings and are in accordance with the General Permit for Stormwater Discharges from Construction Activities		
Ш	Erosion & Sediment Control Practices		
A.	General	<u>Yes</u>	<u>No</u>
	1. Practice meets purpose and design criteria		
	2. Standard details and construction notes are provided		
	3. Special timing of practice noted if applicable		
	4. Provisions for traffic crossings shown on the drawings where necessary		
В.	Practices Controlling Runoff	Yes	<u>No</u>
	1. Positive drainage is maintained with contributing drainage area shown		
	2. Flow grades properly stabilized		
	3. Adequate outlet or discharge condition stabilized		
	4. Necessary dimensions, gradations, calculations, and materials shown		
C.	Practices Stabilizing Soil	<u>Yes</u>	<u>No</u>
	1. Seeding rates and areas properly shown on the drawings		
	2. Mulch materials and rates specified on the drawings		
	3. Sequencing and timing provisions limit soil exposure to 7 to 14 days as appropriate		

C.	Practices Stabilizing Soil (cont'd)	<u>Yes</u>	No
	4. Rolled Erosion Control Products (RECP's) used are specified to location and appropriate weight/tie down		
	5. All soil seed bed preparation and amendments are specified on the drawings or in the specifications		
	6. The seeding dates are specified to cover the entire year for both temporary and permanent seedings		
	7. Maximum created slopes are no steeper than 2 foot horizontal to 1 foot vertical with Cut and Fill slopes shown		
D.	Practices Controlling Sediment	Yes	<u>No</u>
	1. Sediment traps/basins are sized in accordance with criteria		
	2. The contributing drainage area is shown on the grading plan		
	3. All scaled dimensions and volumes are shown on the plan		
	4. Maintenance requirements and clean out elevations established for all sediment control practices (50% capacity)		
	5. All access points of the project are shown to be stabilized		
	6. Storm drain inlets adequately protected		
	7. Buffer filter strips are appropriately sited and installed		
	7. Silt fences are shown on the contour lines with no more than one quarter acre per 100 foot drainage to it		
	8. Temporary sediment traps are not being used at locations of future stormwater infiltration facilities		
	9. Dewatering devices for traps and basins are adequately designed with details shown on the plans		
	10. Geotextile filter bags are properly sited, sized, and have their maintenance requirements detailed on the drawings		
	11. Turbidity curtains are properly located with installation, anchoring, and maintenance details shown on the plans		

<b>Additional Comments and Notes</b>		
Plan Reviewed By:	Date:	
2 am 2010 1100 Dy.	 	

## APPENDIX F CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG BOOK

## STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

#### SAMPLE CONSTRUCTION SITE LOG BOOK

#### **Table of Contents**

- I. Pre-Construction Meeting Documents
  - a. Preamble to Site Assessment and Inspections
  - b. Pre-Construction Site Assessment Checklist
- II. Construction Duration Inspections
  - a. Directions
  - b. Modification to the SWPPP

## I. PRE-CONSTRUCTION MEETING DOCUMENTS Project Name Permit No. \_\_\_\_\_\_ Date of Authorization \_\_\_\_\_\_ Name of Operator \_\_\_\_\_\_ Prime Contractor

#### a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector<sup>1</sup> conduct an assessment of the site prior to the commencement of construction<sup>2</sup> and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization<sup>3</sup> using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

<sup>1</sup> Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.

<sup>2 &</sup>quot;Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

<sup>3 &</sup>quot;Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

#### b. Pre-construction Site Assessment Checklist (NOTE: Provide comments below as necessary) 1. Notice of Intent, SWPPP, and Contractors Certification: Yes No NA [] [] Has a Notice of Intent been filed with the NYS Department of Conservation? [] [] Is the SWPPP on-site? Where?\_ [] [] Is the Plan current? What is the latest revision date?\_ [] [] Is a copy of the NOI (with brief description) onsite? Where? [] [] Have all contractors involved with stormwater related activities signed a contractor's certification? 2. Resource Protection Yes No NA [ ] [ ] Are construction limits clearly flagged or fenced? [] [] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection. [] [] Creek crossings installed prior to land-disturbing activity, including clearing and blasting. 3. Surface Water Protection Yes No NA [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed. [] [] Bodies of water located either on site or in the vicinity of the site have been identified and protected. [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed. [] [] Are clearing and grading operations divided into areas <5 acres? 4. Stabilized Construction Access Yes No NA [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed. [] [] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover. [] [] Sediment tracked onto public streets is removed or cleaned on a regular basis. 5. Sediment Controls Yes No NA

[] [] Silt fence material and installation comply with the standard drawing and specifications.
[] [] Silt fences are installed at appropriate spacing intervals

[] [] Sediment/detention basin was installed as first land disturbing activity.

[] [] Sediment traps and barriers are installed.

#### 6. Pollution Prevention for Waste and Hazardous Materials

#### Yes No NA

[] [] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.

[ ] [ ] The plan is contained in the SWPPP on page \_\_\_\_\_\_
[ ] [ ] Appropriate materials to control spills are onsite. Where? \_\_\_\_\_

#### II. CONSTRUCTION DURATION INSPECTIONS

#### a. Directions:

Inspection Forms will be filled out during the entire construction phase of the project.

#### **Required Elements:**

- 1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- 2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization:
- 3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- 4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- 5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- 6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

# CONSTRUCTION DURATION INSPECTIONS Page 1 of \_\_\_\_\_ SITE PLAN/SKETCH **Inspector (print name) Date of Inspection Qualified Inspector (print name) Qualified Inspector Signature** The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

#### **Maintaining Water Quality**

Ye	s No	NA
[]	[]	[] Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?
[]	[]	[] Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?
1	٢٦	[] All disturbance is within the limits of the approved plans.
		[] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?
Ho	usel	keeping
		neral Site Conditions
		NA
[]	[]	<ul><li>[] Is construction site litter, debris and spoils appropriately managed?</li><li>[] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?</li></ul>
		[ ] Is construction impacting the adjacent property? [ ] Is dust adequately controlled?
2.	Ter	nporary Stream Crossing
		NA
[]	[]	<ul> <li>[ ] Maximum diameter pipes necessary to span creek without dredging are installed.</li> <li>[ ] Installed non-woven geotextile fabric beneath approaches.</li> <li>[ ] Is fill composed of aggregate (no earth or soil)?</li> <li>[ ] Rock on approaches is clean enough to remove mud from vehicles &amp; prevent sediment from entering stream during high flow.</li> </ul>
		bilized Construction Access NA
		[] Stone is clean enough to effectively remove mud from vehicles.
		[] Installed per standards and specifications?
		Does all traffic use the stabilized entrance to enter and leave site?
		[] Is adequate drainage provided to prevent ponding at entrance?
Ru	noff	Control Practices
		cavation Dewatering
		NA
		[] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
		[] Clean water from upstream pool is being pumped to the downstream pool.
		[ ] Sediment laden water from work area is being discharged to a silt-trapping device.

#### **Runoff Control Practices (continued)**

2. Flow Spreader	
Yes No NA	
] [] Installed per plan.	
[ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flo	w.
[ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.	
3. Interceptor Dikes and Swales	
Yes No NA	
[ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.	
[ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.	
[ ] [ ] Sediment-laden runoff directed to sediment trapping structure	
4. Stone Check Dam	
Yes No NA	
[ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).	
[ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure)	).
[] [] Has accumulated sediment been removed?.	
5. Rock Outlet Protection	
Yes No NA	
] [] Installed per plan.	
[ ] [ ] Installed concurrently with pipe installation.	
Soil Stabilization	
Topsoil and Spoil Stockpiles  Yes No NA	
[ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.	
[ ] [ ] Sediment control is installed at the toe of the slope.	
•	
2. Revegetation	
Yes No NA [ ] [ ] Temporary seedings and mulch have been applied to idle areas.	
[ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings	
[] [] [] a menes immunition to topson has been applied under permanent seedings	
Sediment Control Practices	
. Silt Fence and Linear Barriers	
Yes No NA	
[ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).	
[ ] [ ] Joints constructed by wrapping the two ends together for continuous support.	
[ ] [ ] Fabric buried 6 inches minimum.	
[ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.	
Sediment accumulation is% of design capacity.	

#### CONSTRUCTION DURATION INSPECTIONS

Page 4 of \_\_\_\_\_

#### **Sediment Control Practices (continued)**

2.	Sto	rm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock of
	Mai	nufactured practices)
Yes	s No	NA
[]	[]	[] Installed concrete blocks lengthwise so open ends face outward, not upward.
[]	[]	[] Placed wire screen between No. 3 crushed stone and concrete blocks.
[]	[]	[] Drainage area is 1acre or less.
[]	[]	[] Excavated area is 900 cubic feet.
		[] Excavated side slopes should be 2:1.
		[] 2" x 4" frame is constructed and structurally sound.
		[] Posts 3-foot maximum spacing between posts.
		[] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8 inch spacing.
Гl	гп	[ ] Posts are stable, fabric is tight and without rips or frayed areas.
		[] Manufactured insert fabric is free of tears and punctures.
		[] Filter Sock is not torn or flattened and fill material is contained within the mesh sock.
		nt accumulation% of design capacity.
Scu	iiiic	in accumulation70 of design capacity.
3	Ten	nporary Sediment Trap
		NA
		[] Outlet structure is constructed per the approved plan or drawing.
		[] Geotextile fabric has been placed beneath rock fill.
		[] Sediment trap slopes and disturbed areas are stabilized.
		nt accumulation is% of design capacity.
DCC.		in declination is
4.	Ten	nporary Sediment Basin
		NA
		[] Basin and outlet structure constructed per the approved plan.
		[] Basin side slopes are stabilized with seed/mulch.
		[] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
		[] Sediment basin dewatering pool is dewatering at appropriate rate.
		nt accumulation is% of design capacity.
200		an accommunity of according to the property of
Not	<u>te</u> :	Not all erosion and sediment control practices are included in this listing. Add additional pages
		to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.
		with their respective standards.
		Construction inspection checklists for post-development stormwater management practices car
		be found in Appendix F of the New York Stormwater Management Design Manual.

#### CONSTRUCTION DURATION INSPECTIONS

#### b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

- 1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
- 2. The SWPPP proves to be ineffective in:
  - a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
  - b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and

3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will

implement any measure of the SWPPP. **Modification & Reason:** 

### **APPENDIX 9**

Enforcement Response Plan (In Progress)

### **APPENDIX 10**

Post Construction Oversight Program Plan (In Progress)

### **APPENDIX 11**

Distributed Educational Brochures and Flyers

# Remember, it ALL drains to our lakes and rivers



## Keep pollution out of storm drains

Storm drains and roadside ditches lead to our lakes and streams. So, any oil, pet waste, leaves, or dirty water from washing your car or other outside activities that enters a storm drain gets into our lakes and streams.

How can you help? Simple. **Use a broom instead of a hose** to clean your driveway. Keep leaves, grass clippings, and trash away from the storm drain, and **never dump motor oil, pet waste, or dirty, soapy water** down the storm drain.

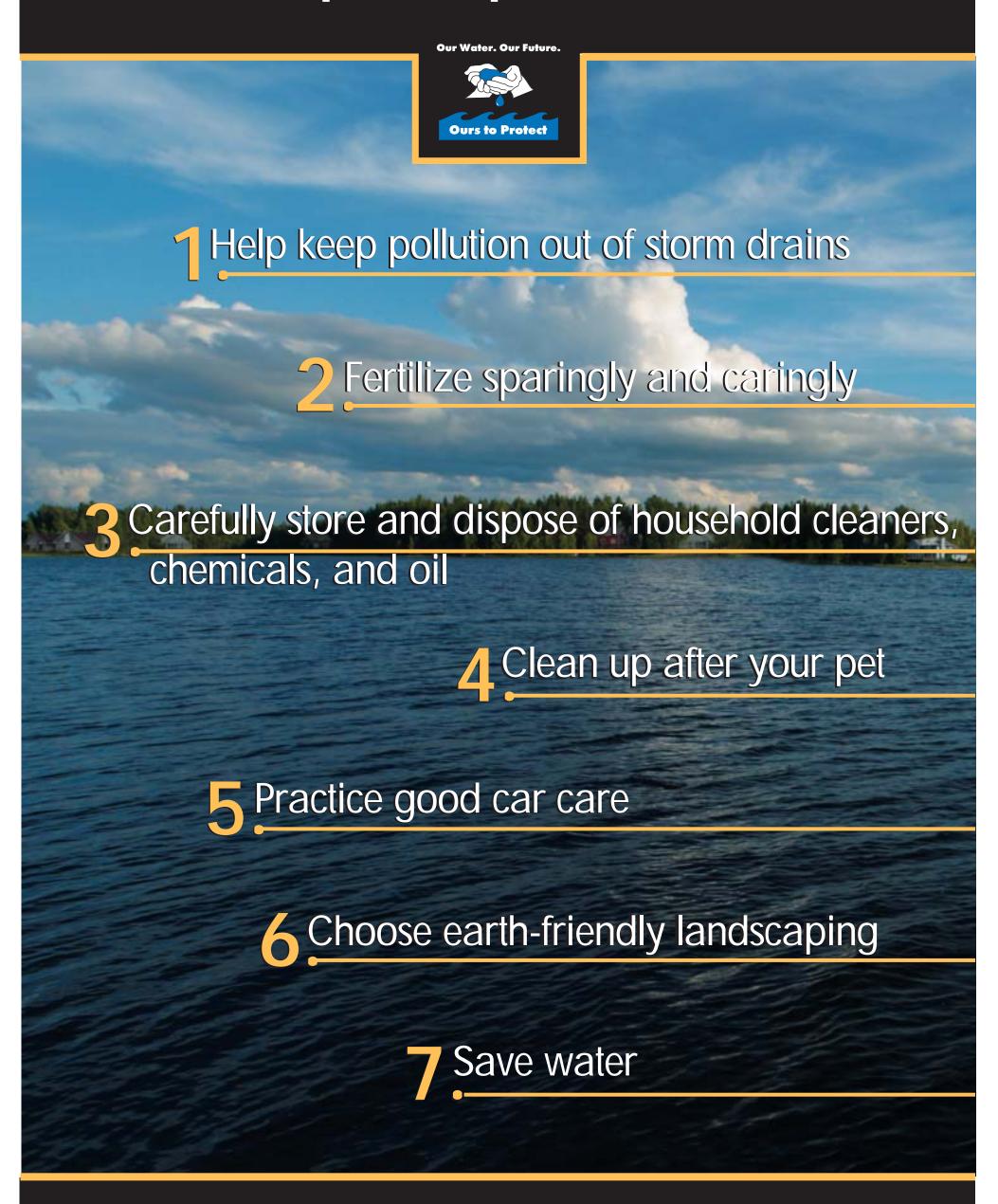
Remember, only rain in the drain!

#### Find out more at www.semcog.org.

Brought to you by the Southeast Michigan Partners for Clean Water.

Support provided by SEMCOG, the Southeast Michigan Council of Governments (313-961-4266) and the Rouge River National Wet Weather Demonstration Project.

## Seven Simple Steps to Clean Water



Our Water. Our Future. Ours to Protect.

Find out more at www.semcog.org.

## Why should I care about Stormwater Pollution?

#### What is Stormwater?

Stormwater is rain that falls on roofs or paved areas like driveways, roads and footpaths. This water is carried away by a system of stormwater pipes that is separate from the sewage system. It eventually ends up in our rivers and the ocean.

## Why is stormwater pollution an important issue that I need to care about?

As stormwater travels over the land, it picks up all kinds of chemicals and materials that are not naturally found in our waterways. Some are toxic even in small amounts. Others, such as nutrients, are not poisonous but may be produced in such great quantities that nature can't cope. This results in pollution of our waterways that can kill plants and animals that live in the water. Pollution of our waterways can also mean we can't boat, swim or fish because it is unpleasant or even unsafe.



Rubbish and pollution gets washed into our waterways:

- 'Natural' pollution such as dog droppings, leaves and garden clippings
- Chemical pollution such as car washing detergents and fertilisers
- Litter

### What is being done to stop stormwater pollution?

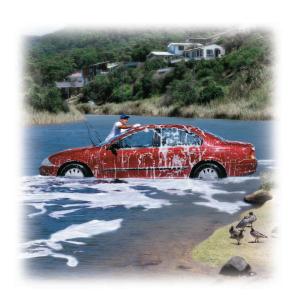
In 1997, the State Government committed \$60 million over three years to tackle stormwater pollution. Some of it goes to fund local projects, including building 'pollution traps' which catch pollution before it has a chance to enter the waterways.

Councils and the EPA are also undertaking education campaigns to prevent the pollution going down the drain in the first place.











# **Everything that goes into our drains ends up in our waterways: Remember** *the Drain is Just for Rain*

Here's a few simple things you can do to improve the quality of water where you swim, fish or boat.

## DO

### In the garden...

 Sweep gutters, driveways and back yards regularly and put the leaves and clippings on the garden, compost or in the bin.

#### In the street...

 Clean up pet droppings and dispose of them in the garden, rubbish bins, or toilet.

### With the car...

 Wash your car over gravel or grass and use a minimum amount of detergent.

## Renovating...

- Wash water-based paint from brushes over the lawn.
- Allow unused paint in tins to dry out and then put in the bin.

## DON'T

### In the garden...

 Hose leaves, dirt and grass clippings down the drain or into the gutter.

#### In the street...

• Drop packaging or cigarette butts on the ground.

#### With the car...

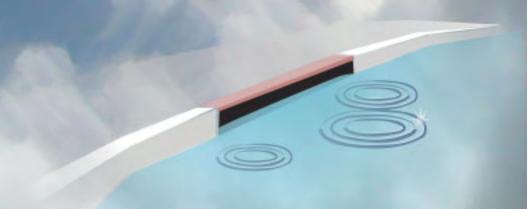
- Wash the car in the street.
- Empty the bucket down the drain.

## Renovating...

Wash brushes over the drain.



# After the Storm



A Citizen's Guide to Understanding Stormwater



## What is stormwater runoff?



Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

## Why is stormwater runoff a problem?



Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.

## The effects of pollution



Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- ◆ Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- ◆ Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- ◆ Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life.
   Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.



 Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.



## Stormwater Pollution Solutions



Recycle or properly dispose of household products that contain chemicals, such as insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids. Don't pour them onto the ground or into storm drains.

#### Lawn care

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash



into storm drains and contribute nutrients and organic matter to streams.

- ♦ Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- ◆ Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains or streams.
- ◆ Cover piles of dirt or mulch being used in landscaping projects.

#### Auto care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.



- ♦ Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the ground.
- ◆ Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.

#### Septic systems

Leaking and poorly maintained septic



systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- ◆ Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).
- ♦ Don't dispose of household hazardous waste in sinks or toilets.

#### Pet waste

Pet waste can be a major source of bacteria and excess nutrients in local waters.

♦ When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.





NO DUMPING! DIMINS TO BAY

Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.

## Residential landscaping

Permeable Pavement—Traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

Rain Barrels—You can collect rainwater from rooftops in mosquitoproof containers. The water can be used later on lawn or garden areas.



Rain Gardens and **Grassy Swales**—Specially designed areas planted

with native plants can provide natural places for



rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.

Vegetated Filter Strips—Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants stormwater picks up as it flows across driveways and streets.

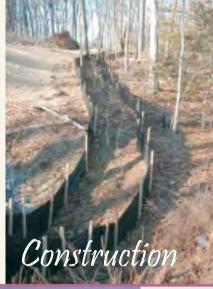


Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- ◆ Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- ♦ Cover grease storage and dumpsters and keep them clean to avoid leaks.
- Report any chemical spill to the local hazardous waste cleanup team.
   They'll know the best way to keep spills from harming the environment.

Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

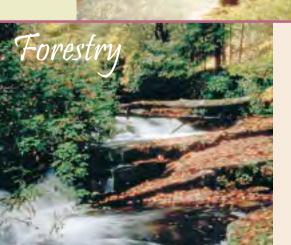
- ◆ Divert stormwater away from disturbed or exposed areas of the construction site.
- ◆ Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.





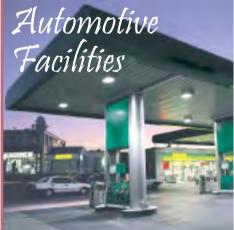
Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

- ◆ Keep livestock away from streambanks and provide them a water source away from waterbodies.
- Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- ◆ Vegetate riparian areas along waterways.
- Rotate animal grazing to prevent soil erosion in fields.
- ◆ Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.



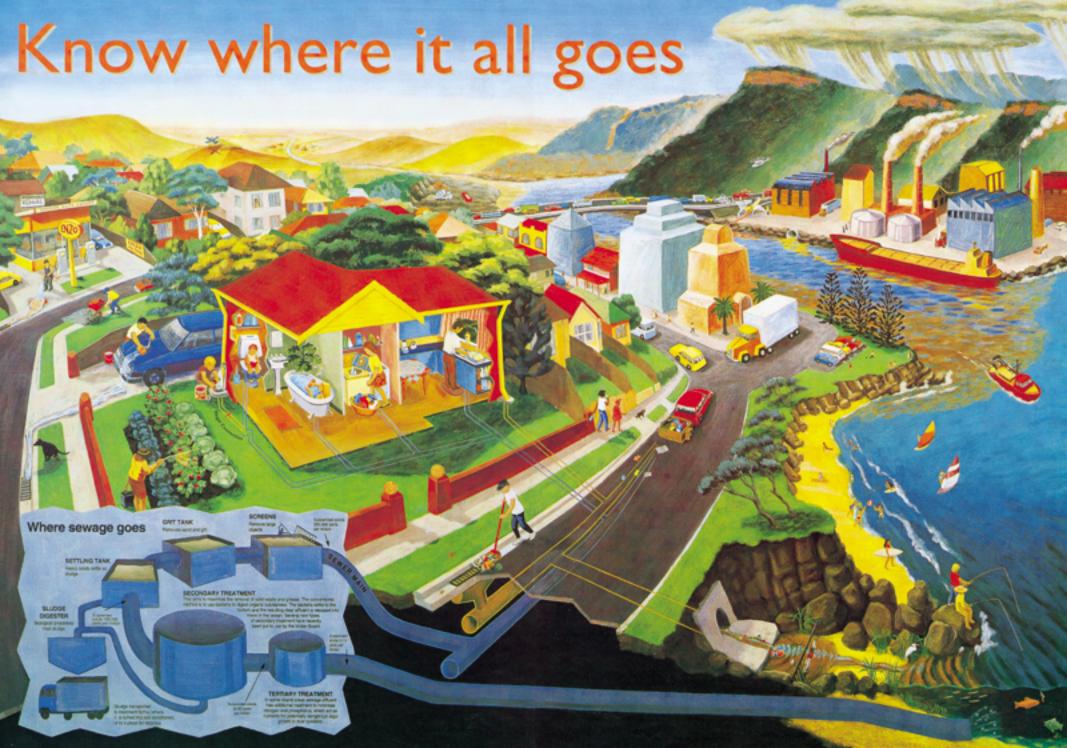
Improperly managed logging operations can result in erosion and sedimentation.

- ◆ Conduct preharvest planning to prevent erosion and lower costs.
- ♦ Use logging methods and equipment that minimize soil disturbance.
- ◆ Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor.
- ♦ Construct stream crossings so that they minimize erosion and physical changes to streams.
- Expedite revegetation of cleared areas.



Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- Clean up spills immediately and properly dispose of cleanup materials.
- Provide cover over fueling stations and design or retrofit facilities for spill containment.
- Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies
- Install and maintain oil/water separators.



#### VILLAGE OF ISLANDIA

#### STORMWATER MANAGEMENT PROGRAM

### STORMWATER

#### AND THE

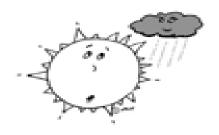
### **CONSTRUCTION INDUSTRY**



Runoff from construction sites can contain significant pollution including sediment, concrete fines, lubricants and fuels, solvents, fertilizers, pesticides and many other contaminants which, if allowed to enter storm drains, will pollute area waterways, and potentially our groundwater. Mitigation steps must be taken to ensure that no runoff leaves the site during the dry season and that stormwater contamination during rain events is minimized.

Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than that of forest lands. The New York State Stormwater Program requires operators of construction sites one acre or larger (including smaller sites that are part of a larger common plan of development) to obtain authorization to discharge stormwater under an NYS Department of Environmental Conservation construction storm water permit. All construction projects in the Village of Islandia must follow specific construction Best Management Practices, or BMPs. BMPs ensure that hazardous materials and pollutants stay onsite and don't get washed or dumped into the storm drain system. These BMPs are discussed in detail following this summary.

Typical techniques used to contain runoff are swales, diversion ditches, and stormwater treatment devices such as dry wells, sediment control ponds (on large sites) and several proprietary fixtures. Where stormwater is collected on site it can be recycled for dust control and irrigation. Stabilizing excavated material, stockpiled soil and fill to prevent wind loss and erosion by storms is essential to stormwater protection. It is far easier and more economical to prevent stormwater contamination at the source than to attempt to capture and clean it later.



#### Best Management Practices (BMPs) for All Construction Sites

The following information provides a summary of guidance on a variety of BMPs typically used on construction sites.

#### **Construction Phasing**

- Sequence construction activities so that soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Immediately seed areas that will be exposed for 7 days or longer.
- Install sediment control practices before any soil disturbance begins.
- Schedule site stabilization activities immediately after the land has been graded to its final contours.

#### Dirt Stockpiles

Cover or seed all dirt stockpiles.

#### Storm Drain Inlet Protection

- Use appropriate methods to protect the storm drain to filter out trash and debris.
- If inlet filters are used, maintain them regularly.

#### Silt Fence

- Inspect silt fences after each rainstorm and weekly.
- Make sure the bottom of the silt fence is buried in the ground 6 inches.
- Make sure the stormwater does not flow around the silt fence during storm events.
- Attach fence securely to stakes. Stakes should be on a downslope side of the fence.
- Use hay bales for added support and protection.

#### <u>Protect Natural Features</u>

- Identify and protect areas where existing vegetation, such as trees, should not be disturbed by construction activities.
- Protect streams, stream buffers, wild woodlands, wetlands and other sensitive areas from any disturbance or construction activity with fencing or by clearly marking the areas.

#### Vegetative Buffers

- Protect and install vegetative buffers along waterbodies to slow and filter stormwater runoff.
- Maintain buffers by replanting periodically to ensure their effectiveness (mowing discourages growth of woody vegetation, which actually takes up more runoff)

For More Information, contact:

#### The Village of Islandia

1100 Old Nichols Road Islandia, NY 11749

(631) 348-1133 (TEL) (631) 348-7650 (FAX)

Mayor Allan M. Dorman



### NYS Department of Environmental Conservation NYS Education Department



## **IMPORTANT MESSAGE**

## **Help Protect New York's Waters**

## **Don't Flush** Unwanted Household Medications or Pour Them Down the Drain

**Return** to collection events where available

or

Mix with something undesirable such as coffee grounds, cat litter or dirt

Tape up containers

**Toss** in your garbage



For full instructions or designated collection events visit:

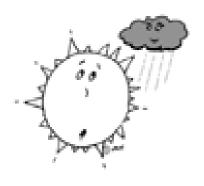
www.dontflushyourdrugs.net

### VILLAGE OF ISLANDIA

#### A RESIDENT'S GUIDE

To





#### What is STORMWATER?

Stormwater runoff is precipitation from rain or snowmelt that flows over ground. As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt, and other pollutants. Stormwater can flow into a storm sewer or directly to a stream, river, lake or other waterbody. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water. Polluted runoff is the nation's greatest threat to clean water.

#### What has the Village of Islandia done to combat stormwater runoff?

In March 2003, the Village submitted a Notice of Intent (NOI) to the US Environmental Protection Agency (EPA) which outlined the course of action Islandia will follow over the next five years to implement six minimum control measures, ranging from capital improvements to public and employee educational programs.

The Village has installed stormwater mitigation structures along a section of Johnson Avenue that drains into the headwaters of the Connetquot River. The River is an ecologically sensitive trout-spawning stream that discharges to the Great South Bay segment of the South Shore Estuary Reserve.

Visit the NYS DEC's website for more local information:

www.dec.state.ny.us/website/dow/mainpage.htm



#### What can YOU do?



- © Pick up after your pet.
- © Never dump anything down storm drains.
- © Maintain your lawn with minimal use of chemicals. Learn about Integrated Pest Management (IPM).
- © Do not let yard waste accumulate on paved surfaces sweep up driveways, sidewalks, and roads. Compost such waste instead.
- © Select native plant and grass species that are drought- and pest-resistant.
- © Vegetate bare spots in your yard. Conserve water Avoid running water when washing dishes, brushing your teeth, etc.
- © Take your car to the car wash instead of washing it in the driveway.
- © Check your car for leaks and recycle used motor oil.
- Have your septic tank pumped and system inspected regularly.
- Minimize your use of de-icing materials.
- © Use a rain barrel to catch and store water for gardens.
- © Direct downspouts from paved areas to vegetated areas.
- © Before beginning any outdoor project, locate the nearest storm drains and protect them from debris and other materials.
- ⑤ Do not feed water birds (ducks, geese) This encourages them to stay for the winter and their droppings pollute area waterways.
- © Drain swimming pools only when necessary: allow pool water to stand for a few days without adding any chemicals <u>before</u> draining, as chlorine dissipates rapidly.
- © Report any illegal dumping or discharges to the Village (631-348-1133) or the Town of Islip (631-581-9703) immediately.





#### For More Information, contact:

#### The Village of Islandia

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#### Mayor Allan M. Dorman

#### **EPA** storm water web sites:

- <a href="http://www.epa.gov/npdes/stormwater">http://www.epa.gov/npdes/stormwater</a> (EPA's stormwater program homepage)
- <a href="http://www.epa.gov/owow/nps">http://www.epa.gov/owow/nps</a> (EPA's nonpoint source program homepage)
- http://cfpub1.epa.gov/npdes/home.cfm?program\_id=6
- http://www.epa.gov/region02/water/npspage.htm

The EPA's Storm Water Phase II Rule requires that all operators of small MS4s (Municipal Separate Storm Sewer Systems) in urban areas develop and implement a storm water management program that addresses six minimum control measures. These six control measures include a public education program, a public involvement program; the detection and elimination of illicit/illegal discharges; controls for construction sites disturbing more than 1 acre; controls for new developments and redevelopment; and pollution prevention/good housekeeping practices as part of the operation and maintenance of the community's storm sewer systems. By developing a storm water management program that is comprised of these basic control measures, it is expected that there will be significant reductions in the amount of pollutants that are discharged into receiving waterbodies.

## VILLAGE OF ISLANDIA MUNICIPAL EMPLOYEE INFORMATION GUIDE

## STORMWATER BASICS

#### What is STORMWATER?

Stormwater runoff is precipitation from rain or snowmelt that flows over ground. As stormwater flows over driveways, lawns, and sidewalks, it picks up debris, chemicals, dirt, and other pollutants. Stormwater can flow into a storm sewer or directly to a stream, river, lake or other waterbody. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water. Polluted runoff is the nation's greatest threat to clean water. All municipal activities should have an operations and maintenance program designed to prevent and reduce pollutants in stormwater runoff from municipal operations.

#### What can YOU do to assist Islandia in combating storm water pollution?

- © <u>Catch Basin and Drain Maintenance</u>: Inspect storm drains and other storm water control structures and clean any accumulated sediment and debris as soon as possible.
- © Grounds Maintenance:
  - (1) Avoid over-watering to prevent excess runoff.
  - (2) Sweep paved surfaces rather than hosing down or using blowers.
  - (3) Clean up all spills and leaks using "dry" methods (w/ absorbent materials and/or rags).
  - (4) Store materials so they are protected from weather elements, such as rain and wind.
  - (5) Install an automatic rain shut-off device on sprinkler systems.
  - (6) Direct downspouts from paved areas to vegetated areas.
  - (7) Minimize your use of de-icing materials.
- © General: Ensure all applicable Best Management Practices (BMPs) are being followed.

#### **Employee Certification**

Employee Name (print)	Title	Signature	Date

#### No Drugs Down the Drain



If you're like most people, you have accumulated a collection of prescription drugs and other pharmaceuticals that are no longer needed. Once it was common practice to flush these medications down the toilet.

We now know that some of these substances are bad for our environment. The drugs may pass through sewage treatment plants and septic tanks into surface waters, soils, and the groundwater. The federal government has released new guidelines which are designed to reduce the diversion of prescription drugs while also protecting the environment.

## New Federal prescription drug disposal guidelines urge you to:

 Take unused, unneeded or expired prescription drugs out of their original containers.

- Mix the prescription drugs with an undesirable substance like coffee grounds or kitty litter, and put them in impermeable, nondescript containers such as empty cans or sealable bags, further ensuring that the drugs are not diverted or accidentally ingested by children or pets.
- Throw these containers in the trash.
- Flush prescription drugs down the toilet only if the accompanying patient information specifically instructs that it is safe to do so.
- Return unused, unneeded or expired prescription drugs to pharmaceutical take-back locations for safe disposal.

## Facts About Prescription Drug Disposal

- Drugs can be scavenged and illegally sold, or could poison children and animals.
- Unused medications improperly disposed of can harm you and your environment.
- When drugs are flushed, they may not be broken down by the sewage treatment facilities and septic tank systems and can enter the soil, surface water and groundwater.
- Research studies have shown that exposure to drugs found in waterways is having a serious, negative impact on fish and other aquatic life.
- Pollution prevention the elimination or minimization of the pollution source - is preferable to cleaning up the environment. Thereby minimizing both public cost and human and ecological exposure.

## Why Should I Take the Time To Do This?

Properly disposing of unwanted medications may be inconvenient, but there are some very compelling reasons to do this in a safe and responsible manner.

#### • It's your environment – Please don't flush!

Drugs that are flushed down the toilet may pass through sewage treatment plants and septic tanks. These substances are released into waterways with the waste water which can lead to adjacent soil and ground water. Similarly, septic tanks systems may release the pharmaceuticals directly into the soil and eventually into the groundwater.

#### Abuse is prevalent!

Abuse of prescription drugs, particularly painkillers, has increased among teenagers and young adults due to the ease of obtaining drugs. Sixty per cent of the persons who abuse painkillers indicated that they received the drugs free from friends or relatives.

You can make a difference!

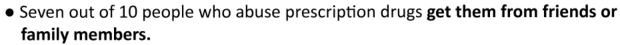
Children, pets or scavenging animals could find the medication and ingest it. Drugs could be scavenged and illegally sold. Take action to minimize the threat of accidental poisoning or drug abuse. Let's take precautions now to avoid harm to future generations and the environment. Your participation is appreciated!

## **GOT LEFTOVER MEDICINE?**

Before storing it, flushing it, or throwing it out with the trash, READ THIS.

### For your safety. And for your family's.





- Among children, emergency room visits for accidental drug poisonings are twice as common as poisonings for other household products (e.g., cleaning solutions).
- Flushing leftover medicines sends them into our rivers, streams, and waterways because wastewater treatment plants are not designed to remove them.
- Studies have found antibiotics, anti-seizure medicines, mood stabilizers, and sex hormones in drinking water across the U.S.
- While the long-term human health effects of repeated exposure to low levels
  of these chemicals are not yet known, the effects on marine life are
  well-documented and include serious harm to fish populations.

## Don't flush! Empty your medicine cabinet in a safer, healthier, and more environmentally responsible way.

#### **Drop Off**

Did you know?

Some pharmacies, police stations, and sheriff's offices allow you to drop off your unwanted meds. One-day medicine collection events (such as those sponsored by the Drug Enforcement Administration) may also be available in your area. However, only law enforcement agencies and some one-day collection events can accept controlled substances. To find drop-off locations near you, visit:

www.productstewardship.us/ drugtakeback-locations

#### **Mail Back**

Some pharmacies and other organizations offer postage-paid envelopes for a small fee, which you can use to mail medicines to a safe disposal program. However, mail-back programs cannot accept controlled substances.

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#### **Last Resort**

ONLY if there are no drop-off sites or mail-back programs available near you, you can discard medicine in the trash by following these guidelines:

- 1. Cross out any personal information on your medicine bottle.
- 2. Empty your medicine into a sealable, disposable container. Add cat litter, coffee grounds, or another undesirable substance to discourage abuse.
- 3. Discard the sealed container with your household trash.
- 4. Recycle (whenever possible) the empty medicine bottle.



Learn more: www.productstewardship.us/drugtakeback

# Take the Stormwater Runoff Challenge

#### **Across:**

- 1) The area of land that drains into an estuary, lake, stream, or groundwater is known as a
- 4) The \_\_\_\_\_ of speeding boats can erode shorelines.
- 5) Maintaining your \_\_\_\_\_ tank will help to prevent bacteria and nutrients from leaking into groundwater and surface waters.
- 7) Wetland plants act like a natural water \_\_\_\_\_, removing harmful pollutants from stormwater runoff.
- 8) Leave your grass clippings on your \_\_\_\_ to reduce the need for commercial fertilizers.
- 9) A single quart of motor \_\_\_\_\_\_, if disposed of improperly, can pollute 2 million gallons of water.
- 10) Fertilizers and animal wastes contain that "feed" algae and other aquatic plants harmful to water quality.
- 12) Polluted runoff from both rural and sources has a significant impact on water quality.
- 16) Storm \_\_\_\_\_ don't always connect to sewage treatment plants, so runoff can flow directly to rivers, lakes, and coastal waters
- 18) Follow directions carefully when applying \_\_\_\_ on your lawn—more isn't always better.
- 19) Polluted runoff (also called\_\_\_\_\_ source pollution) comes from so many places that it's hard to "pinpoint" a source.
- 20) Yard and vegetable food waste are suitable additions to a \_\_\_\_\_ pile.

#### Down:

- 2) Don't dump used motor oil into storm drains. it!
- of soil from barren land can cloud nearby streams.
- \_\_\_\_ prevent flooding, improve water quality, and provide habitat for waterfowl, fish, and wildlife.
- 5) Marking "Do Not Dump, Drains to Bay" on a \_\_\_\_\_ is one way to educate people about polluted runoff.
- 6) Excess sediment, nutrients, toxics, and pathogens are all types of runoff
- 11) Polluted \_\_\_\_\_ is the nation's #1 water quality problem.
- 13) The cattail is one wetland \_\_\_\_\_ that helps purify polluted runoff.
- 14) Too much \_\_\_\_\_ in water can harm aquatic life.
- 15) Proper crop and animal management on helps to control water pollution.
- 17) \_\_\_\_\_ impact development helps control stormwater pollution through conservation approaches and techniques.

#### **Choices:**

compost nonpoint sediment drains nutrients septic erosion Oil storm drain farms plant urban fertilizer pollution wakes filter recycle watershed runoff lawn wetlands Low





For more information, please visit EPA's
Polluted Runoff web site at www.epa.gov/nps



## **How to Dispose of Medicines Properly**

**DON'T:** Flush expired or unwanted prescription and over-the-counter drugs down the toilet or drain unless the label or accompanying patient information specifically instructs you to do so.

Return unwanted or expired prescription and over-the-counter drugs to a drug take-back program or follow the steps for household disposal below.

#### **1ST CHOICE: DRUG TAKE-BACK EVENTS**

To dispose of prescription and over-the-counter drugs, call your city or county government's household trash and recycling service and ask if a drug take-back program is available in your community. Some counties hold household hazardous waste collection days, where prescription and over-the-counter drugs are accepted at a central location for proper disposal.



**Drug Take-Back Event** 

#### 2ND CHOICE: HOUSEHOLD DISPOSAL STEPS\*



1. Take your prescription drugs out of their original containers.



2. Mix drugs with an undesirable substance, such as cat litter or used coffee grounds.



3. Put the mixture into a disposable container with a lid, such as an empty margarine tub, or into a sealable bag.



4. Conceal or remove any personal information, including Rx number, on the empty containers by covering it with permanent marker or duct tape, or by scratching it off.



5. The sealed container with the drug mixture, and the empty drug containers, can now be placed in the trash.

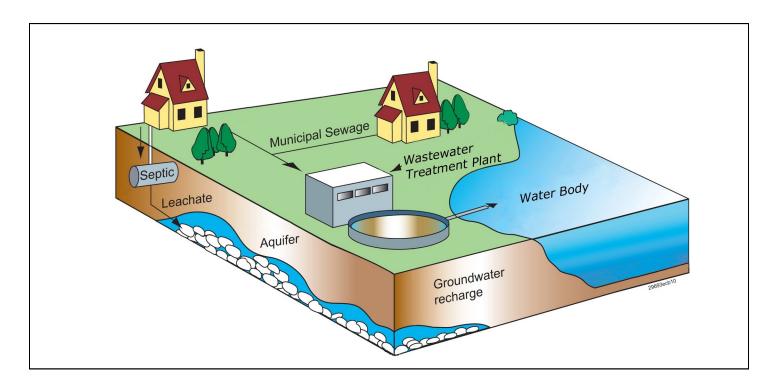
## How Proper Disposal of Medicines Protects You and the Earth:

- Prevents poisoning of children and pets
- Deters misuse by teenagers and adults
- Avoids health problems from accidentally taking the wrong medicine, too much of the same medicine, or a medicine that is too old to work well
- Keeps medicines from entering streams and rivers when poured down the drain or flushed down the toilet

## How Improper Disposal of Medicines May End Up in Our Drinking Water Sources

In homes that use septic tanks, prescription and over-the-counter drugs flushed down the toilet can leach into the ground and seep into ground water.

In cities and towns where residences are connected to wastewater treatment plants, prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the treatment system and enter rivers and lakes. They may flow downstream to serve as sources for community drinking water supplies. Water treatment plants are generally not equipped to routinely remove medicines.



For more information, go to www.epa.gov/ppcp/ Or call the Safe Drinking Water Hotline at 800-426-4791

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